Two (2) searches attached

[redacted] # 09/719423

Access DB# 97848

88194

SEARCH REQUEST FORM

Scientific and Technical Information Center

[redacted]

Requester's Full Name: *Maury Audet* Examiner #: *79808* **Date:** *2/28/03*

Art Unit: *1654* Phone Number: *305-5039* **Serial Number:** *09/719423*

Mail Box and Bldg/Room Location: *11D13* Results Format Preferred: *PAPER*

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: 6-12-98

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Attachment of (rI.3) to Lysine (B29) or B1 (Phe) of (3,3,5'T3) (3,5,3'T3)

Human insulin. (See, page with structures as to attachment sites of both molecules).

THANKS (consisting of)

NEED BY FRI. 3/7/02 IF POSSIBLE TX

(3,3',5'rT3)

~~3,5,3'T3~~

Maury,
If you have any quest. regarding search strategy, pls. let me know.
Beverly
1E05
c8-4994

S1

STAFF USE ONLY

Searcher: Beverly c4994

Searcher Phone #: _____

Searcher Location: _____

Date Searcher Picked Up: _____

Date Completed: 03-05-03

Searcher Prep & Review Time: _____

Clerical Prep Time: _____

Online Time: _____

Type of Search

NA Sequence (#) _____

AA Sequence (#) _____

Structure (#) _____

Bibliographic _____

Litigation _____

Fulltext _____

Patent Family _____

Other _____

Vendors and cost where applicable

STN ✓

Dialog _____

Questel/Orbit _____

Dr.Link _____

Lexis/Nexis _____

Sequence Systems _____

WWW/Internet _____

Other (specify) _____

PTO-1590 (8-01)

EP 1221476 A2 20020710 (200272)* EN 14
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1221476	A2 Div ex	EP 1991-309596	19911017
		EP 2002-3143	19911017

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1221476	A2 Div ex	EP 481791

PRIORITY APPLN. INFO: GB 1990-22545 19901017
AN 2002-668386 [72] WPIDS
CR 1992-134049 [17]
AB EP 1221476 A UPAB: 20021108
NOVELTY - Culturing (M1) recombinant Chinese Hamster ovary (CHO) cells to obtain a product, comprising growing CHO cells in medium free from protein, lipid and carbohydrate isolated from animal source, and containing water, osmolarity regulator, a buffer, and supplement of an amino acid, iron source, lipid source, recombinant **insulin** or **insulin** analog, a cell growth enhancer e.g. folic acid, vitamin B6 and vitamin B12, is new.

DETAILED DESCRIPTION - Culturing (M1) recombinant Chinese Hamster ovary (CHO) cells to obtain a product, which comprises growing CHO cells in a medium which is free from protein, lipid and carbohydrate isolated from an animal source including transferrin and comprises water, an osmolality regulator to maintain the osmolality of the medium within the range of 200-350 mOsm, a buffer to maintain the pH of the medium within the range of 6.5-7.5 and an energy source in the range 1000-10000 mg/liter, and in addition, a supplement which comprises, at least one amino acid, an inorganic or recombinant iron source, a lipid source in the range 0.05-10 mg/l, a recombinant **insulin** or **insulin** analog, a cell growth enhancer which is involved in the folate pathway chosen from folic acid, vitamin B6 and vitamin B12, where the medium is capable of supporting both the growth of the cells in suspension at a density greater than 1 multiply 105 cells/ml and the subsequent secretion of the product from the cells in the absence of serum.

USE - For culturing recombinant Chinese Hamster ovary (CHO) cells to obtain a product such as an antibody, preferably anti-CDw52 antibody (claimed).

Dwg.0/2

L55 ANSWER 3 OF 28 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001138508 EMBASE
TITLE: Endocrine problems in the chronically critically ill patient.
AUTHOR: Vasa F.R.; Molitch M.E.
CORPORATE SOURCE: Dr. M.E. Molitch, Ctr. Endocrinol. Metab./Molec. Med., Northwestern Univ. Medical School, 303 East Chicago Avenue, Terry 15-731 Chicago, IL 60611, United States. molitch@northwestern.edu
SOURCE: Clinics in Chest Medicine, (2001) 22/1 (193-208).

Refs: 95
ISSN: 0272-5231 CODEN: CCHMDA
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 003 Endocrinology
006 Internal Medicine
015 Chest Diseases, Thoracic Surgery and Tuberculosis
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The endocrine adaptations to critical illness are varied. In the diabetic patient, counterregulatory hormones predispose to **insulin** resistance and hyperglycemia, a derangement accentuated by the use of glucocorticoids and enteral or parenteral nutrition. Thyroid abnormalities include the euthyroid sick syndrome, which may manifest as a low **T3**, low T4, low TSH, or all three. Illness in patients with pre-existing hypothyroidism or hyperthyroidism may precipitate myxedema coma or thyroid storm, respectively. The most important issue related to calcium is that of acute hypercalcemia, which, in the intensive care unit, usually is caused by malignancy and dehydration. Hyponatremia, a frequently encountered electrolyte disturbance, is evaluated best and treated according to volume status.

L55 ANSWER 4 OF 28 MEDLINE DUPLICATE 1

ACCESSION NUMBER: 2000439262 MEDLINE
DOCUMENT NUMBER: 20296011 PubMed ID: 10839201
TITLE: Contribution of de novo protein synthesis to the hypertrophic effect of IGF-1 but not of thyroid hormones in adult ventricular cardiomyocytes.

AUTHOR: Bell D; McDermott B J
CORPORATE SOURCE: Department of Therapeutics and Pharmacology, The Cardiovascular Research Centre, The School of Medicine, The Queen's University of Belfast, Northern Ireland, UK.

SOURCE: MOLECULAR AND CELLULAR BIOCHEMISTRY, (2000 Mar) 206 (1-2) 113-24.
Journal code: 0364456. ISSN: 0300-8177.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ENTRY DATE: Entered STN: 20000928
Last Updated on STN: 20000928
Entered Medline: 20000921

AB BACKGROUND: Enhanced expression of IGF-1 occurs in left ventricular hypertrophy (LVH) associated with systemic hypertension. Cardiac dysfunction accompanied by LVH is also observed in hyperthyroidism. OBJECTIVE: to assess the relative contributions of de novo protein synthesis and attenuated protein degradation to increased protein mass associated with cardiomyocyte hypertrophy elicited by IGF-1 and thyroid hormones (tri-iodo thyronine **T3**, and l-thyroxine T4), respectively. METHODS: total mass of protein, and both the incorporation, and removal of previously incorporated l-U-14C-**phenylalanine**, indices of protein synthesis and degradation,

respectively, were assessed in quiescent adult rat ventricular cardiomyocytes maintained in short-term culture, and corrected for DNA content, as a index of cell number. RESULTS: IGF-1 (1 pM-100 nM) increased cell protein significantly, maximally at 1 nM and by 38% above basal value after 24 h. **T3** (10 pM-2 microM) and T4 (10 pM-2 microM) increased cell protein significantly maximally at 1 microM and by 33.2 and 30.5%, respectively, above basal value. IGF-1 (< or = 10 pM), **T3** (10 pM-2 microM) and T4 (10 pM-2 microM) did not increase incorporation of 1-U-14C-**phenylalanine** above basal values. IGF-1 (100 pM-100 nM) increased incorporation of radiolabel significantly maximally at 100 nM and by 56%. T4 (100 pM) and IGF-1 (10 pM), concentrations that did not stimulate de novo protein synthesis, attenuated the degradation of radiolabelled protein by 13.6 and 11.8%, respectively, compared to control values after 48 h. CONCLUSION: These data indicate that the acute hypertrophic response to (i) thyroid hormones cannot be attributed to initiation of de novo protein synthesis; (ii) IGF- 1 comprises two components; the response elicited by IGF-1 (< 10 pM) is independent of, while the response elicited by IGF-1 (> 100 pM) is due to de novo protein synthesis.

L55 ANSWER 5 OF 28 WPIDS (C) 2003 THOMSON DERWENT

ACCESSION NUMBER: 2000-126540 [11] WPIDS

DOC. NO. CPI: C2000-038533

TITLE: Novel **Insulin** analog useful as an **insulin** replacement in humans for treating diabetes.

DERWENT CLASS: B04

INVENTOR(S): BRANDENBURG, D; JONES, R H; KLEINJUNG, J; SHOJAEE-MORADI, F

PATENT ASSIGNEE(S): (DEUW) DEUT WOLLFORSCHUNGSINSTITUT; (UNLO) KINGS COLLEGE LONDON

COUNTRY COUNT: 83

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9965941	A1	19991223	(200011)*	EN	14
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9880297	A	20000105	(200024)		
EP 1086130	A1	20010328	(200118)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
JP 2002518408 W		20020625	(200243)		14

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9965941	A1	WO 1998-GB1722	19980612
AU 9880297	A	AU 1998-80297	19980612
		WO 1998-GB1722	19980612
EP 1086130	A1	EP 1998-928469	19980612

Searcher : Shears 308-4994

	WO 1998-GB1722	19980612
JP 2002518408 W	WO 1998-GB1722	19980612
	JP 2000-554766	19980612

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9880297	A	Based on	WO 9965941
EP 1086130	A1	Based on	WO 9965941
JP 2002518408 W		Based on	WO 9965941

PRIORITY APPLN. INFO: WO 1998-GB1722 19980612

AN 2000-126540 [11] WPIDS

AB WO 9965941 A UPAB: 20000301

NOVELTY - A compound (I) comprising an **insulin** molecule that is covalently bound to a **3,3',5'-triiodothyronine** molecule is new.

ACTIVITY - Antidiabetic.

MECHANISM OF ACTION - **Insulin** agonist.

USE - (I) is used for **insulin** replacement therapy, preferably for the treatment of diabetes in a human or other animal (claimed).

ADVANTAGE - (I) has a similar potency to human **insulin** in the presence of binding proteins such as thyroxin binding proteins (TBP), whereas the potency of the prior art **insulin** analog, T4 **insulin**, under the same conditions, is reduced. Indeed, the ED50 of (I) is not significantly affected by the presence of TBG compared to that of **insulin**. In addition, (I) inhibits the binding of 125-**Insulin** to **insulin** receptors on liver plasma membrane (LPM) like **insulin**, and this was not affected by the presence of TBP, in contrast to the same inhibition by T4 **insulin**.

Dwg.0/0

L55 ANSWER 6 OF 28 WPIDS (C) 2003 THOMSON DERWENT

ACCESSION NUMBER: 1998-271745 [24] WPIDS

DOC. NO. CPI: C1998-084730

TITLE: Culture media for supporting growth of animal cells - comprise, e.g. fibroblast growth factor and agent which increases intra-cellular cAMP levels, such as isoproterenol.

DERWENT CLASS: B04 B05 D16

INVENTOR(S): BATTISTA, P J; JUDD, D A

PATENT ASSIGNEE(S): (LIFE-N) LIFE TECHNOLOGIES INC

COUNTRY COUNT: 79

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9816629	A1	19980423	(199824)*	EN	55

RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

AU 9747517 A 19980511 (199837)

EP 939797 A1 19990908 (199941) EN
R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE SI

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9816629	A1	WO 1997-US18260	19971009
AU 9747517	A	AU 1997-47517	19971009
EP 939797	A1	EP 1997-910044	19971009
		WO 1997-US18260	19971009

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9747517	A	Based on	WO 9816629
EP 939797	A1	Based on	WO 9816629

PRIORITY APPLN. INFO: US 1996-28471P 19961011

AN 1998-271745 [24] WPIDS

AB WO 9816629 A UPAB: 19980617

Serum-free cell culture medium (A), comprises a fibroblast growth factor (FGF) and an agent which causes an increase in intracellular levels of cyclic adenosine monophosphate (cAMP).

The medium is able to support cultivation of animal epithelial cells in vitro.

Also claimed are:

(1) a method for producing (A);

(2) a cell culture medium (B) comprising adenine, ethanolamine, D-glucose, hydrocortisone, N-[2-hydroxyethyl]piperazine-N'-[2-ethanesulphonic acid] (HEPES), **insulin**, lipoic acid, phenol red, phosphoethanolamine, putrescine, sodium pyruvate, **T3**, thymidine, transferrin, L-asparagine, L-arginine, L-alanine, L-aspartic acid, L-cysteine, L-glutamic acid, glycine, L-glutamine, L-histidine, L-isoleucine, L-leucine, L-**lysine**, L-methionine, L-**phenylalanine**, L-proline, L-serine, L-threonine, L-tryptophan, L-tyrosine, L-valine, biotin, choline chloride, D-Ca++-pantothenate, folic acid, I-inositol, niacinamide, pyridoxine, riboflavin, thiamine, vitamin B12, a calcium salt, CuSO4, FeSO4, KCl, a magnesium salt, a manganese salt, sodium acetate, NaCl, NaHCO3, Na2HPO4, Na2SO4, a selenium salt, a silicon salt, a molybdenum salt, a vanadium salt, a nickel salt, a tin salt and a zinc salt, and

(3) a composition comprising heparin, EGF, a FGF and an agent which causes an increase in intracellular levels of cAMP. The composition replaces an organ or gland extract in an animal cell culture medium.

USE - The culture media are useful for supporting growth of animal epithelial cells, including primary cells (e.g. keratinocytes or cervical epithelial cells) and established cell lines (e.g. HeLa cells).

ADVANTAGE - The culture media are serum-free and organ/gland extract free. Bovine pituitary extract (BPE) used in prior art media is replaced by the **insulin**, EGF, FGF and other additives described above. BPE complicates experimental models and interpretation of results, and may either stimulate or inhibit

growth or differentiation of keratinocyte cultures, depending on the concentrations of other components in the medium. The stability of BPE is limited to about 4 weeks under normal use conditions. Dwg.0/6

L55 ANSWER 7 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:355137 BIOSIS
DOCUMENT NUMBER: PREV199800355137
TITLE: Effects of methionine and hormones on amino acid concentration in the skin of Angora goats.
AUTHOR(S): Puchala, R.; Pierzynowski, S. G.; Sahlu, T. (1)
CORPORATE SOURCE: (1) E Graza Inst. Goat Res., Langston Univ., Langston, OK 73050 USA
SOURCE: Small Ruminant Research, (June 15, 1998) Vol. 29, No. 1, pp. 93-102.
ISSN: 0921-4488.
DOCUMENT TYPE: Article
LANGUAGE: English

AB The effects of methionine (Met), **insulin**, cortisol and triiodothyronine (**T3**) infusions on amino acid (AA) and glucose venous outflow in the skin was determined in Angora wethers (n = 5). The goats had chronically catheterized superficial branches of the deep circumflex iliac artery and vein on each side. Successively increasing doses of Met, or constant doses of Met and successively increasing doses of hormones were intra-arterially infused for 60 min into one side of the goat. The other side served as a control and was infused with saline (5 ml h-1). Infusion of 0, 0.2, 1, 5 and 0 mg h-1 of Met increased venous Met concentrations in the treated side (21.1, 22.1, 25.4, 38.4 and 15.7 muM, respectively), whereas venous outflow remain unchanged (19.2 muM) in the control side. Met infusion increased ($P < 0.05$) venous plasma cystine (Cys) concentrations in the treated side. Increasing levels of **insulin** (0, 1, 10 and 100 ml h-1) with constant infusion of Met (3 mg h-1), reduced ($P < 0.01$) plasma Met concentration in the treated side from 31.3 to 21.3 muM across **insulin** infusions. Cortisol (0, 1.5, 15 and 150 mug h-1) had no effect on Met concentration. Following **T3** infusion (0, 0.1, 1 and 10 mug h-1), plasma Met concentration decreased ($P < 0.01$) from 29.7 to 20.3 muM across **T3** infusions. A corresponding reduction in Met concentration from 20.6 to 16.6 muM was observed in plasma from the control side. Plasma concentrations of Cys, Val, leucine (Leu), Ile, **lysine** (**Lys**), Arg, Thr and Gly from both iliac veins were also decreased ($P < 0.05$) as a result of **T3** treatment. The above results suggest that **insulin** regulates skin Met metabolism via local effects, whereas **T3** influenced AA metabolism via centrally regulated mechanisms. In Angora goats skin demand for Met may be higher than average blood Met concentrations.

L55 ANSWER 8 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 2
ACCESSION NUMBER: 1998:115391 BIOSIS
DOCUMENT NUMBER: PREV199800115391
TITLE: Influence of high ambient temperature on performance of reproductive sows.
AUTHOR(S): Prunier, A. (1); Messias De Braganca, M.; Le Dividich, J.
CORPORATE SOURCE: (1) Stn. Rech. Procines, Inst. Natl. Rech.

SOURCE: Agronomique, 35590 Saint Gilles France
Livestock Production Science, (Dec. 1, 1997) Vol. 52, No. 2, pp. 123-133.
ISSN: 0301-6226.

DOCUMENT TYPE: Article
LANGUAGE: English

AB Two trials were conducted on pure Large White multiparous (Trial 1, n = 36) and primiparous (Trial 2, n = 24) sows exposed to an ambient temperature within the zone of thermal comfort (18 or 20degreeC) or above the evaporative critical temperature (27 or 30degreeC). During a 3-week lactation, all sows in Trial 1 and those maintained at 30degreeC in Trial 2 were fed ad libitum whereas sows at 20degreeC in Trial 2 were paired-fed with those at 30degreeC. The same standard diet containing 17.2% crude protein, 0.84% **lysine** and 13.0 MJ DE/kg was used during lactation. Single blood samples were drawn from the jugular vein before the morning meal at day 107 of gestation, at days 13 and 20 postpartum (p.p.), at days 1 and 12 post-weaning in Trial 2. After weaning, sows were checked daily for oestrus in the presence of a mature boar. Daily feed intake was lower at 27degreeC than at 18degreeC from day 4 p.p. until weaning in Trial 1 (-28%) and very low in both groups of sows in Trial 2 (2.8 kg/day). Lactational loss of sow liveweight did not differ between groups in Trial 1 whereas it was lower at 30degreeC than at 20degreeC in Trial 2 (1.32 vs. 1.80 kg/day, $P < 0.001$). Daily litter growth was lower in the warmer environment in both trials (Trial 1: 1.58 vs. 2.15 kg/day, Trial 2: 1.60 vs. 1.95 kg/day, $P < 0.05$). In Trial 2, plasma concentrations of thyroid hormones were lower at 30degreeC than at 20degreeC (**T3**: 0.51 vs. 0.61 ng/ml; T4: 22.5 vs. 28.5 ng/ml), those of free fatty acids and **insulin** -like growth factor-I did not differ between treatments and, glycemia was higher at 30degreeC ($P < 0.05$). The weaning-to-oestrus interval was longer at 27degreeC than at 18degreeC in Trial 1 but did not differ between temperatures in Trial 2, being delayed in both environments. In conclusion, high ambient temperature reduces appetite, milk production and body reserve mobilization of sows in order to limit heat production. Reduction in feed intake plays probably a role in the delayed return-to-oestrus after weaning under elevated temperature.

L55 ANSWER 9 OF 28 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1996-251455 [25] WPIDS
CROSS REFERENCE: 1996-229923 [23]
DOC. NO. CPI: C1996-079528
TITLE: New ruthenium complexes - useful as immunosuppressive agents and for treating hyper-proliferative vascular disease.

DERWENT CLASS: B02 B03
INVENTOR(S): BASTOS, C M; OCAIN, T D
PATENT ASSIGNEE(S): (PROC-N) PROCEPT INC
COUNTRY COUNT: 67
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9613510	A1	19960509	(199625)*	EN	43

RW: AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU

IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO
NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN

AU 9540176	A	19960523 (199635)	
US 5708022	A	19980113 (199809)	8

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9613510	A1		WO 1995-US14067	19951030
AU 9540176	A		AU 1995-40176	19951030
US 5708022	A	CIP of	US 1994-331204	19941028
			US 1995-482308	19950607

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9540176	A	Based on	WO 9613510

PRIORITY APPLN. INFO: US 1995-482308 19950607; US 1994-331204 19941028; US 1994-331388 19941028; US 1995-472525 19950607

AN 1996-251455 [25] WPIDS
CR 1996-229923 [23]
AB WO 9613510 A UPAB: 19960625
Ruthenium complexes of formula (RulM6)Z (I), and their salts, are new. Rul = ruthenium having an oxidn. state of 2 or 3; M = a monodentate ligand that is a heterocyclic aromatic amine; when the complex is charged; Z = at least one counterion of appropriate charge to render the overall charge of the complex neutral; provided that the ligands are not 6-membered rings contg. one or more nitrogens. Also claimed are: (1) ruthenium complexes of formula (Rul(NH3)3M1m1B1b1T1t1)Z (II), and their salts: M1, **B1**, T1 = ligands that are heterocyclic aromatic amines coordinated to the ruthenium through aromatic nitrogens, provided that the ligand is not pyridine; m1 = 0, 1 or 3; **b1**, t1 = 0 or 1; (2) ruthenium complexes of formula (RuhM2m2B2b2T2t2P2p2)Z (III), and their salts, useful for preventing or reducing a T-lymphocyte mediated immune response of a mammal (e.g. autoimmune disease) and for treating hyperproliferative vascular disorders. Ruh = ruthenium having an oxidn. state of 2, 3 or 4; M2 = a monodentate ligand selected from J or halide; J = ligands contg. N, P, S, C or O; m2 = 0-4 or 6; b2 = 0- 3; t2 = 0- 2; p2 = 0 or 1; B2 = a bidentate ligand selected from aliphatic amines, heterocyclic aromatic amines or J except N-contg. ligands; T2 = a tridentate ligand selected from J; P2 = a polydentate ligand selected from J; (3) ruthenium complexes of formula ((RuhM3m3B3b3T3t3)-O-(RuM4m4B4b4T4t4))Z (IV), and their salts, useful for preventing or reducing a T-lymphocyte mediated immune response of a mammal (e.g. autoimmune disease); M3, M4 = halide or monodentate ligands selected form J except C-contg. ligands; m3, m4 = 0-3 or 5; b3, b4 = 0-2; **t3**, t4 = 0 or 1; B3, B4 = a bidentate ligand selected from aliphatic amines, heterocyclic aromatic amines or J except N or C-contg. ligands; **T3**, T4 = a tridentate ligand selected from J except C-contg. ligands; (4) ruthenium complexes of formula ((RuhM5m5B5b5T5t5)-O-(RuhM6m6B6b6T5t6)=O-(RuhM7m7B7b7T7t7))Z (V), and their salts, for use in preventing or reducing a T-lymphocyte mediate immune response

of a mammal (e.g. autoimmune disease). M5, M6, M7 = J except C-contg. ligands; m5, m6 = 0-3 or 5; m7 = 0-2 or 4; b5, b6, b7 = 0-2; t5, t6, t7 = 0 or 1; B5-B7 = a bidentate ligand selected from aliphatic amines, heterocyclic aromatic amines or J except C-contg. ligands; T5, T6, T7 = a tridentate ligand selected from J except C-contg. ligands.

USE - Complexes of formula (III)-(V) are useful in the mfr. of medicaments for preventing or reducing a T-lymphocyte mediated immune response of a mammal (e.g. autoimmune disease) and for treating hyperproliferative vascular disorders. The autoimmune disease is graft rejection, **insulin** dependent diabetes mellitus, rheumatoid arthritis, psoriasis, hyperplasia of the epidermis, contact dermatitis and symptoms associated therewith, steroid resistant asthma, multiple sclerosis and lupus erythematosus. Compsns. contg. the above cpds. may further comprise an immunosuppressant selected from cyclosporin, rapamycin, FK-506, azathioprine, mizoribine, mycophenolate mofetil, brequinar sodium, leflunomide, 15-deoxyspergulin and combinations of these.

Dwg.0/0

ABEQ US 5708022 A UPAB: 19980302

Ruthenium complexes of formula (RulM6)Z (I), and their salts, are new. Rul = ruthenium having an oxidn. state of 2 or 3; M = a monodentate ligand that is a heterocyclic aromatic amine; when the complex is charged; Z = at least one counterion of appropriate charge to render the overall charge of the complex neutral; provided that the ligands are not 6-membered rings contg. one or more nitrogens. Also claimed are: (1) ruthenium complexes of formula (Rul(NH3)3M1m1B1b1T1t1)Z (II), and their salts: M1, **B1**, T1 = ligands that are heterocyclic aromatic amines coordinated to the ruthenium through aromatic nitrogens, provided that the ligand is not pyridine; m1 = 0, 1 or 3; **b1**, t1 = 0 or 1; (2) ruthenium complexes of formula (RuhM2m2B2b2T2t2P2p2)Z (III), and their salts, useful for preventing or reducing a T-lymphocyte mediated immune response of a mammal (e.g. autoimmune disease) and for treating hyperproliferative vascular disorders. Ruh = ruthenium having an oxidn. state of 2, 3 or 4; M2 = a monodentate ligand selected from J or halide; J = ligands contg. N, P, S, C or O; m2 = 0-4 or 6; b2 = 0- 3; t2 = 0- 2; p2 = 0 or 1; B2 = a bidentate ligand selected from aliphatic amines, heterocyclic aromatic amines or J except N-contg. ligands; T2 = a tridentate ligand selected from J; P2 = a polydentate ligand selected from J; (3) ruthenium complexes of formula ((RuhM3m3B3b3T3t3)-O-(RuM4m4B4b4T4t4))Z (IV), and their salts, useful for preventing or reducing a T-lymphocyte mediated immune response of a mammal (e.g. autoimmune disease); M3, M4 = halide or monodentate ligands selected form J except C-contg. ligands; m3, m4 = 0-3 or 5; b3, b4 = 0-2; **t3**, t4 = 0 or 1; B3, B4 = a bidentate ligand selected from aliphatic amines, heterocyclic aromatic amines or J except N or C-contg. ligands; **T3**, T4 = a tridentate ligand selected from J except C-contg. ligands; (4) ruthenium complexes of formula ((RuhM5m5B5b5T5t5)-O-(RuhM6m6B6b6T5t6)=O-(RuhM7m7B7b7T7t7))Z (V), and their salts, for use in preventing or reducing a T-lymphocyte mediate immune response of a mammal (e.g. autoimmune disease). M5, M6, M7 = J except C-contg. ligands; m5, m6 = 0-3 or 5; m7 = 0-2 or 4; b5, b6, b7 = 0-2; t5, t6, t7 = 0 or 1; B5-B7 = a bidentate ligand selected from aliphatic amines, heterocyclic aromatic amines or J except C-contg. ligands; T5, T6, T7 = a tridentate ligand selected from J except C-contg. ligands.

USE - Complexes of formula (III)-(V) are useful in the mfr. of medicaments for preventing or reducing a T-lymphocyte mediated immune response of a mammal (e.g. autoimmune disease) and for treating hyperproliferative vascular disorders. The autoimmune disease is graft rejection, **insulin** dependent diabetes mellitus, rheumatoid arthritis, psoriasis, hyperplasia of the epidermis, contact dermatitis and symptoms associated therewith, steroid resistant asthma, multiple sclerosis and lupus erythematosus. Compsns. contg. the above cpds. may further comprise an immunosuppressant selected from cyclosporin, rapamycin, FK-506, azathioprine, mizoribine, mycophenolate mofetil, brequinar sodium, leflunomide, 15-deoxyspergulin and combinations of these.
Dwg.0/0

L55 ANSWER 10 OF 28 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 96246033 MEDLINE
DOCUMENT NUMBER: 96246033 PubMed ID: 8785199
TITLE: Metabolic and endocrine changes induced by chronic heat exposure in broiler chickens: biological and endocrinological variables.
AUTHOR: Geraert P A; Padilha J C; Guillaumin S
CORPORATE SOURCE: Station de Recherches Avicoles, Institut National de la Recherche Agronomique, Nouzilly, France.
SOURCE: BRITISH JOURNAL OF NUTRITION, (1996 Feb) 75 (2) 205-16.
Journal code: 0372547. ISSN: 0007-1145.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199609
ENTRY DATE: Entered STN: 19961008
Last Updated on STN: 19961008
Entered Medline: 19960920

AB The present study was designed to investigate the effect of chronic heat exposure (32 degrees constant) on plasma metabolites and hormone concentrations in broiler chickens. At 2 and 4 weeks of age, fifty-four male Shaver broiler chickens were allocated to one of three treatments: 22 degrees, ad lib. feeding (22AL), 32 degrees, ad lib. feeding (32AL) and 22 degrees, pair-feeding with the 32AL group (22PF). Ambient temperature was kept constant at either 22 or 32 degrees for 2 weeks. Plasma glucose, triacylglycerols, phospholipids, non-esterified fatty acids (NEFA), individual amino acids, uric acid, **insulin**, triiodothyronine (**T3**), thyroxine, corticosterone were determined. Sensitivity to exogenous **insulin** was also measured at 7 weeks of age. At 4 and 6 weeks of age, i.e. after 2 weeks at high ambient temperature, fasted 32AL chickens displayed similar concentrations of glucose and triacylglycerols to those of 22AL birds. When fed, 32AL chickens exhibited higher plasma levels of glucose and decreased concentrations of NEFA and amino acids. Feed restriction resulted in intermediate values. Concentrations of all plasma free amino acids were decreased under heat exposure except for aspartic acid, glutamic acid and **phenylalanine**. At 6 weeks of age, plasma **T3** was reduced irrespective of the nutritional state, while plasma corticosterone concentrations were increased in 32AL birds compared with 22AL birds. Heat exposure did not change plasma **insulin** concentration in either fasted or fed

chickens. The 32AL chickens displayed significantly reduced sensitivity to exogenous **insulin** when fasted, but an enhanced response to **insulin** when fed, compared with both 22 degrees groups. Such endocrinological changes could stimulate lipid accumulation through increased de novo lipogenesis, reduced lipolysis and enhanced amino acid catabolism under chronic heat exposure.

L55 ANSWER 11 OF 28 MEDLINE
ACCESSION NUMBER: 95325265 MEDLINE
DOCUMENT NUMBER: 95325265 PubMed ID: 7601791
TITLE: Effects of amino acids administered to a perfused area of the skin in Angora goats.
AUTHOR: Puchala R; Sahlu T; Pierzynowski S G; Hart S P
CORPORATE SOURCE: E (Kika) de la Garza Institute for Goat Research Langston University, OK 73050, USA.
SOURCE: JOURNAL OF ANIMAL SCIENCE, (1995 Feb) 73 (2) 565-70. Journal code: 8003002. ISSN: 0021-8812.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199508
ENTRY DATE: Entered STN: 19950822
Last Updated on STN: 19980206
Entered Medline: 19950808

AB The effect of infusion of supplemental amino acids on growth of mohair by Angora goats was investigated using a skin perfusion model. Four Angora wethers (average BW 32 +/- 2 kg) were implanted bilaterally with silicon catheters into the superficial branches of the deep circumflex iliac artery and vein. For the first 14 d of the experiment, goats were arterially infused with either a mixture of amino acids (one side) or saline (contralateral side). The hourly infusion rates of amino acids were .36 mg of methionine, .36 mg of **lysine**, and .72 mg of leucine. The area of skin supplied by the deep circumflex iliac artery was approximately 300 cm2; a tattoo 10 cm x 15 cm was made in the middle of the perfused region for quantifying mohair production and characteristics. Two weeks after cessation of infusions goats were shorn and the mohair from the tattooed regions was examined. Greasy and clean mohair production from the tattooed region were increased by amino acid infusion compared with the contralateral side infused with saline (3.51 vs 3.16 g, $P < .04$ and 3.13 vs 2.70 g, $P < .07$, respectively). Although mohair length and diameter were not significantly altered, venous concentrations of valine, threonine, arginine, glycine, and histidine were decreased by infusion of the amino acids ($P < .05$), no differences in **T3**, T4, or **insulin** concentrations in venous blood were detected, but plasma cortisol concentration was reduced (1.38 vs 2.61 micrograms/dL, $P < .05$) with amino acid infusion. (ABSTRACT TRUNCATED AT 250 WORDS)

DUPLICATE 4

L55 ANSWER 12 OF 28 MEDLINE
ACCESSION NUMBER: 95209965 MEDLINE
DOCUMENT NUMBER: 95209965 PubMed ID: 7535077
TITLE: **Insulin** sensitivity, hormonal levels and skeletal muscle protein metabolism in tumour-bearing exercising rats.
AUTHOR: Daneryd P; Hafstrom L; Svanberg E; Karlberg I

CORPORATE SOURCE: Department of Surgery, Sahlgrenska Hospital, Goteborg, Sweden.
SOURCE: EUROPEAN JOURNAL OF CANCER, (1995) 31A (1) 97-103. Journal code: 9005373. ISSN: 0959-8049.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
ENTRY MONTH: 199505
ENTRY DATE: Entered STN: 19950510
Last Updated on STN: 19960217
Entered Medline: 19950504

AB We have previously shown that spontaneous physical exercise can delay onset of experimental anorexia and cachexia, and retard tumour growth; we now report the effects on **insulin** sensitivity, hormonal levels and skeletal muscle protein metabolism. **Insulin** sensitivity determined with a euglycaemic hyperinsulinaemic clamp revealed a normalised glucose disposal rate in tumour-bearing exercising (TBE) versus sedentary (TBS) animals (TBE 15.55 +/- 2.71 versus TBS 2.47 +/- 2.12 mg/kg/min; P < 0.05). Both TBE and TBS animals had decreased levels of corticosterone during the clamp. Serum levels of **insulin** during tumour progression were unaffected by exercise, but the **insulin**: glucagon ratio increased and the progressive decrease in **rT3** was attenuated. The concentration of glucagon decreased in both tumour-bearing groups during the experiment, while TBE animals showed a relative reduction in corticosterone. Capacity for skeletal muscle protein synthesis, expressed as RNA: protein ratio, was normalised in TBE animals in two tumour protocols (TBE 5.9 +/- 0.6 versus TBS 4.7 +/- 0.3; TBE 2.9 +/- 0.4 versus TBS 1.8 +/- 0.2; P < 0.05, respectively). Incorporation rate of 14C-**phenylalanine** into skeletal muscle protein was increased in the TBE group in vitro and in vivo. In the postexercise period, protein degradation evaluated by tyrosine release in vitro was increased, but decreased over time. This study has confirmed a positive skeletal muscle protein balance in exercising tumour-bearing animals, partly explained by the increased **insulin** sensitivity. This conclusion was further supported by the less catabolic pattern indicated by hormonal levels.

DUPLICATE 5

L55 ANSWER 13 OF 28 MEDLINE
ACCESSION NUMBER: 96428166 MEDLINE
DOCUMENT NUMBER: 96428166 PubMed ID: 8831269
TITLE: Metabolic, endocrine and haematological responses to intravenous E. coli endotoxin administration in 1-week-old calves.
AUTHOR: Kinsbergen M; Bruckmaier R M; Blum J W
CORPORATE SOURCE: Division of Nutritional Pathology, University of Bern, Switzerland.
SOURCE: ZENTRALBLATT FUR VETERINARMEDIZIN. REIHE A, (1994 Sep) 41 (7) 530-47. Journal code: 0331323. ISSN: 0514-7158.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ENTRY DATE: Entered STN: 19970219

Last Updated on STN: 20000303
Entered Medline: 19970130

AB Responses to i.v. injected E. coli endotoxin (E), followed by saline infusion, as compared with saline infusion alone, were studied for 24 h in 1-week-old calves. After administration of E, respiratory rate (RR), heart rate (HR), rectal temperature (RT), serum iron, **insulin**, (I), cortisol and tumor necrosis factor-alpha, transiently, and urea, continuously, increased. Isoleucine and leucine became elevated at 24 h, whereas white-blood-cell number, free fatty acids (FFA) and triglycerides (TG) increased after an initial fall. After administration of E, packed-cell volume, erythrocyte number, haemoglobin, glucose (G), cholesterol, phospholipids (PL), **lysine**, arginine, proline, citrulline, calcium (Ca), inorganic phosphorus, **insulin**-like growth factor I (IGF-I) and 3,5,3'-triiodothyronine (**T3**) concentrations and alkaline phosphatase (AP) and gamma-glutamyl transferase (gamma GT) activities increased significantly while growth hormone decreased non-significantly. When saline was infused alone, G, TG, PL, Ca, AP, gamma GT, I, IGF-I and **T3** decreased, while FFA, urea and sodium increased, but, changes of G, urea, AP, IGF-I and **T3** were less marked than after injection of E. Potassium, total protein and albumin concentrations, and glutamyl dehydrogenase and glutamate oxalacetate transaminase activities were not significantly affected by either treatment. In conclusion, metabolic and endocrine changes during saline infusion alone were typical for food withdrawal. Changes of variables after administration of E were transient, biphasic or sustained, thus expressing complex interactions between metabolic parameters, endocrine factors and cytokines.

DUPLICATE 6

L55 ANSWER 14 OF 28 MEDLINE
ACCESSION NUMBER: 93259707 MEDLINE
DOCUMENT NUMBER: 93259707 PubMed ID: 8098320
TITLE: The effects of D-fenfluramine on the development of aflatoxin-**B1** induced GGT+ hepatic foci in F344 rats.
AUTHOR: Bell R C; Levitsky D A; Campbell T C
CORPORATE SOURCE: Division of Nutritional Sciences, Cornell University, Ithaca, NY 14853.
SOURCE: INTERNATIONAL JOURNAL OF OBESITY AND RELATED METABOLIC DISORDERS, (1993 Apr) 17 (4) 215-21. Journal code: 9313169. ISSN: 0307-0565.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199306
ENTRY DATE: Entered STN: 19930625
Last Updated on STN: 19950206
Entered Medline: 19930616

AB The role of total caloric intake and attained body weight in the carcinogenic process in rodents is controversial. In the present study we examined the development of hepatic pre-neoplastic foci in rats treated with aflatoxin-**B1** (AFB) and given the drug D-fenfluramine (FEN). Ingestion of this drug leads to a reduction in body weight by increasing the thermogenic response to a meal and by transiently reducing food intake. Young male rats were dosed with AFB or vehicle alone and were then assigned to receive control diet

(NO FEN) or control diet + FEN (FEN; 0.15 g/kg diet) for 12-14 weeks. Body weight gain and food intake were reduced among animals given FEN; brown adipose tissue weight (% body weight) was elevated in these groups. Indices of protein status, and concentrations of **T3**, T4 and **insulin** did not differ among the groups. All animals given FEN developed GGT+ hepatic foci. The number and volume fraction of foci were significantly larger in FEN relative to NO FEN animals. The mean diameter of foci was slightly enhanced among FEN animals. These results suggest that FEN promotes the development of AFB-induced hepatocellular foci, despite reduced food intake and lower body weight. Since FEN is widely used as a weight loss aid, these findings deserve further study.

L55 ANSWER 15 OF 28 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1992-134049 [17] WPIDS
CROSS REFERENCE: 2002-668386 [72]
DOC. NO. CPI: C1992-062682
TITLE: Culture medium for recombinant Chinese hamster ovary cells - contains osmolality regulator, buffer energy source, aminoacid(s), iron source and growth factor.
DERWENT CLASS: B04 D16
INVENTOR(S): KEEN, M J; RAPSON, N T
PATENT ASSIGNEE(S): (WELL) WELLCOME FOUND LTD; (WELL) BURROUGHS WELLCOME CO; (GLAX) GLAXO WELLCOME INC
COUNTRY COUNT: 20
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 481791	A	19920422	(199217)*	EN	15
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
AU 9185915	A	19920507	(199227)		
CA 2053586	A	19920418	(199227)		
ZA 9108249	A	19930630	(199331)		29
EP 481791	A3	19920708	(199334)		
AU 645615	B	19940120	(199409)		
JP 06070757	A	19940315	(199415)		13
US 5316938	A	19940531	(199421)		
NZ 240248	A	19941125	(199501)		
US 5633162	A	19970527	(199727)		10
JP 2625302	B2	19970702	(199731)		13

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
EP 481791	A		EP 1991-309596	19911017
AU 9185915	A		AU 1991-85915	19911016
CA 2053586	A		CA 1991-2053586	19911016
ZA 9108249	A		ZA 1991-8249	19911016
EP 481791	A3		EP 1991-309596	19911017
AU 645615	B		AU 1991-85915	19911016
JP 06070757	A		JP 1991-332998	19911016
US 5316938	A	Cont of	US 1991-777729	19911016
			US 1992-991717	19921218
NZ 240248	A		NZ 1991-240248	19911016
US 5633162	A	Cont of	US 1991-777729	19911016

		Cont of	US 1992-991717	19921218
			US 1994-205379	19940304
JP 2625302	B2		JP 1991-332998	19911016

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 645615	B	Previous Publ.	AU 9185915
US 5633162	A	Cont of	US 5316938
JP 2625302	B2	Previous Publ.	JP 06070757

PRIORITY APPLN. INFO: GB 1990-22545 19901017
AN 1992-134049 [17] WPIDS
CR 2002-668386 [72]
AB EP 481791 A UPAB: 20021113
A biochemically defined culture medium for culturing engineered CHO cells is claimed which is free from protein, lipid and carbohydrate isolated from an animal soruce and comprising water, an osmolality regulator, a buffer, an energy soruce, amino acids including L-glutamine, an inorganic or recombinant iron source, a recombinant or synthetic growth factor and opt. non-ferrous metal ions, vitamins and cofactors.

The amino acids may be e.g. L-alanine, L-arginine, L-asparagine, L-aspartic acid, L-cystine, L-glutamic acid, glycine, L-histidine, L-isoleucine, L-leucine, L-**lysine**, L-methionine, L-**phenylalanine**, L-proline, L-serine, L-threonine, L-tryptophan, L-tyrosine or L-valine. The growth factor may be e.g. **insulin**, Nucellin (RTM), PDGF, thyroxine **T3**, thrombin, interleukin, progesterone, hydrocortisone or vitamin E. The medium may also contain methotrexate.

USE/ADVANTAGE - The medium is capable of supporting the growth and secretion of prod. from recombinant CHO cells in suspension in small and large scale fermenters, static cultures and/or spinners. It can support growth of cells at high cell density, greater than 1 x 10 power5 cells/ml up to or greater than 1.5 x 10 power6 cells/ml and prod. secretion of 30 mg/l up to greater than 150 mg/l. The medium is capable of supporting this growth and prod. secretion over multiple passages lasting up to or greater than 6 months. The cell lines can be used for the prodn. of proteins such as antibodies, e.g. anti-CDW52 antibody

Dwg.0/2

ABEQ ZA 9108249 A UPAB: 19931118
Biochemically defined culture medium for culturing engineered Chinese hamster ovary (CHO) cell lines, is essentially free from protein, lipid and carbohydrate isolated from an animal source. The medium comprises water, an osmolality regulator, a buffer, an energy source, amino acids including L-glutamine, an inorganic or recombinant iron source, and a synthetic or recombinant growth factor, and optionally non-ferrous metal ions vitamins and cofactors. Cells adapted to grow in such a culture medium are also claimed.

Dwg.0/0

ABEQ US 5633162 A UPAB: 19970702
A method for growing CHO cells which comprises culturing CHO cells under cell growing conditions in the absence of serum in a medium comprising water, an osmolality regulator, a buffer, an energy source, L-glutamine and at least one additional amino acid, an

inorganic, organic or recombinant iron source and a recombinant or synthetic growth factor wherein each component of said medium is obtained from a source other than directly from an animal source. Dwg.0/2

L55 ANSWER 16 OF 28 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 93116060 MEDLINE
DOCUMENT NUMBER: 93116060 PubMed ID: 1361949
TITLE: Role of B13 Glu in **insulin** assembly. The hexamer structure of recombinant mutant (B13 Glu-->Gln) **insulin**.
AUTHOR: Bentley G A; Brange J; Derewenda Z; Dodson E J; Dodson G G; Markussen J; Wilkinson A J; Wollmer A; Xiao B
CORPORATE SOURCE: Institut Pasteur, Paris, France.
SOURCE: JOURNAL OF MOLECULAR BIOLOGY, (1992 Dec 20) 228 (4) 1163-76.
Journal code: 2985088R. ISSN: 0022-2836.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 19930219
Last Updated on STN: 19980206
Entered Medline: 19930129

AB The assembly of the **insulin** hexamer brings the six B13 glutamate side-chains at the centre into close proximity. Their mutual repulsion is unfavourable and zinc co-ordination to B10 histidine is necessary to stabilize the well known zinc-containing hexamers. Since B13 is always a carboxylic acid in all known sequences of hexamer forming **insulins**, it is likely to be important in the hormone's biology. The mutation of B13 Glu-->Gln leads to a stable zinc-free hexamer with somewhat reduced potency. The structures of the zinc-free B13 Gln hexamer and the 2Zn B13 **insulin** hexamer have been determined by X-ray analysis and refined with 2.5 A and 2.0 A diffraction data, respectively. Comparisons show that in 2Zn B13 Gln **insulin**, the hexamer structure (T6) is very like that of the native hormone. On the other hand, the zinc-free hexamer assumes a quaternary structure (**T3**/R3) seen in the native 4Zn **insulin** hexamer, and normally associated only with high chloride ion concentrations in the medium. The crystal structures show the B13 Gln side-chains only contact water in contrast to the B13 glutamate in 2Zn **insulin**. The solvation of the B13 Gln may be associated with this residue favouring helix at **B1** to B8. The low potency of the B13 Gln **insulin** also suggests the residue influences the hormone's conformation.

L55 ANSWER 17 OF 28 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 93153216 MEDLINE
DOCUMENT NUMBER: 93153216 PubMed ID: 1493378
TITLE: Effects of epidermal growth factor, phorbol ester, and retinoic acid on hormone synthesis and morphology in porcine thyroid follicles cultured in collagen gel.
AUTHOR: Hishinuma A; Kasai K; Ichimura K; Emoto T; Shimoda S
CORPORATE SOURCE: Department of Endocrinology, Dokkyo University School

of Medicine, Tochigi, Japan.
SOURCE: THYROID, (1992 Winter) 2 (4) 351-9.
Journal code: 9104317. ISSN: 1050-7256.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199303
ENTRY DATE: Entered STN: 19930326
Last Updated on STN: 20000303
Entered Medline: 19930311

AB Epidermal growth factor (EGF), phorbol esters (PEs), and retinoic acid (RA) inhibit differentiated functions of thyrocytes. In the present study the inhibitory effects of these growth-promoting factors on hormone synthesis were studied in thyroid follicles cultured in type-I collagen gel, and morphologic alteration by these factors was examined by light and electron microscopy (EM). Porcine open thyroid follicles obtained by treatment with 0.1% collagenase were embedded in collagen gel and cultured in Ham's F12 medium supplemented with 6H (**insulin**, hydrocortisone, somatostatin, transferrin, glycyl-his-**lys**, and thyrotropin) + 0.5% fetal bovine serum (FBS). After 1 week these open follicles developed to closed follicles, and the medium was changed to one containing 6H + 0.5% FBS + 0.1 microM sodium iodide (NaI). Some media were supplemented with either EGF, phorbol 12-myristate 13-acetate (PMA), or all-trans RA. The closed follicles retained ability for hormone synthesis for 2 weeks after the medium change in the presence of 6H + FBS + NaI. The amounts of T4 and **T3** secreted into the culture medium from day 9 to day 12 after the medium change were 60% and 45% of those from day 0 to day 4, respectively. EGF reduced production of T4 and **T3** by 61% and 69%, respectively; PMA, by 87% and 99%; and RA, by 55% and 44%. In the medium supplemented with 6H + 0.5% FBS, the follicles exhibited intact polarity. Apical surfaces with microvilli were oriented to the follicular lumen and tight junctions were on the apical side of cell-to-cell contacts. Desmosomes were found on both the apical and basal halves of the cell contacts.(ABSTRACT TRUNCATED AT 250 WORDS)

L55 ANSWER 18 OF 28 MEDLINE
ACCESSION NUMBER: 88307620 MEDLINE
DOCUMENT NUMBER: 88307620 PubMed ID: 3136658
TITLE: Relationship between glutamine concentration and protein synthesis in rat skeletal muscle.
AUTHOR: Jepson M M; Bates P C; Broadbent P; Pell J M; Millward D J
CORPORATE SOURCE: Department of Human Nutrition, London School of Hygiene and Tropical Medicine, United Kingdom.
SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (1988 Aug) 255 (2 Pt 1) E166-72.
Journal code: 0370511. ISSN: 0002-9513.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198809
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19980206

Entered Medline: 19880914

AB Muscle glutamine concentration ([GLN]) and protein synthesis rate (Ks) have been examined in vivo in well-fed, protein-deficient, starved, and endotoxemic rats. With protein deficiency (8 or 5% casein diet), [GLN] fell from 7.70 to 5.58 and 3.56 mmol/kg in the 8 and 5% diet groups, with Ks falling from 15.42 to 9.1 and 6.84%/day. Three-day starvation reduced [GLN] and Ks to 2.38 mmol/kg and 5.6%/day, respectively. In all these groups food intakes and **insulin** were generally well maintained (except in the starved group), whereas free 3,5,3'-triiodothyronine (**T3**) was depressed in the starved and 5% protein group. The E. coli lipopolysaccharide endotoxin (3 mg/kg) reduced [GLN] to 5.85 and 4.72 mmol/kg and Ks to 10.5 and 9.10%/day in two well-fed groups. **Insulin** levels were increased, and free **T3** levels fell. Combined protein deficiency and endotoxemia further reduced [GLN] and Ks to 1.88 mmol/kg and 4.01%/day, respectively, in the 5% protein rats. Changes in both ribosomal activity (KRNA) and concentration (RNA/protein) contributed to the fall in Ks in malnutrition and endotoxemia, although reductions in the RNA concentration were most marked with protein deficiency and reductions in the KRNA dominated the response to the endotoxin. The changes in [GLN] and Ks were highly correlated as were [GLN] and both KRNA and the RNA concentration, and these relationships were unique to glutamine. These relationships could reflect sensitivity of glutamine transport and protein synthesis to the same regulatory influences, and the particular roles of **insulin** and **T3** are discussed, as well as any direct influence of glutamine on protein synthesis.

L55 ANSWER 19 OF 28 MEDLINE DUPLICATE 9

ACCESSION NUMBER: 85257156 MEDLINE
DOCUMENT NUMBER: 85257156 PubMed ID: 3926459
TITLE: Protein utilization in growth: effect of **lysine** deficiency on serum growth hormone, somatomedins, **insulin**, total thyroxine (T4) and triiodothyronine, free T4 index, and total corticosterone.
AUTHOR: Cree T C; Schalch D S
SOURCE: ENDOCRINOLOGY, (1985 Aug) 117 (2) 667-73.
Journal code: 0375040. ISSN: 0013-7227.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198508
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850829

AB We have studied the effect of a **lysine**-deficient diet on the growth of young rats and on serum levels of GH, somatomedins [**insulin**-like growth factors (IGFs) I and II], **insulin**, total T4 and **T3**, free T4 index, and total corticosterone. Rats eating a wheat gluten diet consumed about one third as much **lysine** as controls eating an isocaloric and isonitrogenous casein diet and grew at approximately 56% of the control rate. The mean (+/- SEM) GH level in the experimental group (68 +/- 9 ng/ml) was significantly lower (P less than 0.01) than that in the controls (106 +/- 17 ng/ml), but was not correlated with

age or body weight and was only weakly correlated with total IGF. In contrast, total IGF and IGF-I were significantly correlated with age and body weight (r = 0.86 and r = 0.84, respectively; P less than 0.01). The levels of these somatomedins in the wheat gluten-fed animals were consistently and significantly lower than those in their age-matched controls, but not significantly different from those in their weight-matched controls, throughout the study. Serum total T4 and **T3** (but not the free T4 index) and corticosterone were significantly elevated in the experimental rats, perhaps representing a serum binding globulin adaptation to **lysine** deficiency that is not clearly understood. In this study, we have compromised the ability of growing rats to use dietary protein anabolically to examine the nutritional effects of qualitative protein deficiency on growth and the growth-promoting endocrine system.

L55 ANSWER 20 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 10
ACCESSION NUMBER: 1986:147170 BIOSIS
DOCUMENT NUMBER: BA81:57586
TITLE: IN-VITRO CULTURE OF HUMAN THYROID CELLS METHODS AND APPLICATION TO RADIATION BIOLOGY.
AUTHOR(S): MILLER R C; HIRAOKA T; NAKAMURA N; TENOU H; KOPECKY K J; JONES M P
CORPORATE SOURCE: DEP. PATHOL., RADIATION EFFECTS RESEARCH FOUNDATION, 5-2 HIJIYAMA KOEN, MINAMI-KU, HIROSHIMA 730, JAPAN.
SOURCE: J RADIAT RES, (1985) 26 (3), 269-282.
CODEN: JRARAX. ISSN: 0449-3060.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Procedures for establishing primary cultures of human thyroid tissue are described. Tissues removed surgically from patients with papillary carcinoma (PC), follicular adenoma (FA), or hyperthyroidism were grown in culture. In addition, normal cells were separated from the margins of excised tumors and were also cultured. For each gram of thyroid tissue cultured, more than 1 .times. 105 cells attached to culture dishes. A mixture of 2.5% fetal bovine serum supplemented with **insulin**, hydrocortisone, transferrin, glycl-1-histidyl-L-**lysine** acetate, somatostatin and epidermal growth factor was added to nutrient media containing equal parts of Ham's F-12 and minimum essential medium (.alpha.MEM). Complete medium selectively supported epithelial cell growth while restricting fibroblast cell growth, especially during the first two weeks of the primary culture. Cells were stimulated with thyroid stimulating hormone (TSH) and produced raised levels of cAMP and thyroid hormone (**T3**). Culture conditions that affected the response of cells to X-rays were identified. During the culture period, first and second passage cells were compared for differences in their radiosensitivities. In all cases, cells showed differences in their responses to radiation depending on the cell passage number. However, results of replicate experiments of first passage cells that were exposed to X-rays showed good agreement between experiments. This technique makes it possible to quantitate the effects of chemical and physical cytotoxic agents on proliferating human thyroid epithelial cells.

L55 ANSWER 21 OF 28 MEDLINE DUPLICATE 11
ACCESSION NUMBER: 83109485 MEDLINE

DOCUMENT NUMBER: 83109485 PubMed ID: 6822648
TITLE: The effect of thyroid hormones on gluconeogenesis and forearm metabolism in man.
AUTHOR: Sandler M P; Robinson R P; Rabin D; Lacy W W; Abumrad N N
CONTRACT NUMBER: AM-22195 (NIADDK)
M01-RR-00095 (NCRR)
R01-AM-30515 (NIADDK)
SOURCE: JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1983 Mar) 56 (3) 479-85.
Journal code: 0375362. ISSN: 0021-972X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198303
ENTRY DATE: Entered STN: 19900318
Last Updated on STN: 19970203
Entered Medline: 19830324

AB The present study was designed to examine the effects of excess **T3** on total body glucose production and forearm exchange of glucose, amino acids, and other metabolites. Five healthy male volunteers were studied after an overnight fast, before and 7 days after the administration of 150 micrograms/day **T3**. Glucose production (milligrams per kg/min) was measured using a primed continuous infusion of [3-3H]glucose and gluconeogenic index (micromoles per kg/min) was measured by following the conversion of infused [14C]alanine to [14C]glucose. Blood flow across the forearm was measured using capacitance plethysmography and forearm release of substrates was determined by the Fick principle. After **T3** administration, there was a 3.7-fold rise in **T3** from 150 +/- 15 to 530 +/- 12 ng/dl (P less than 0.001), with no change in **insulin** (12 +/- 1 microU/ml pre-**T3** vs. 13 +/- 2 microU/ml post-**T3**) and glucagon (79 +/- 5 pre-**T3** vs. 84 +/- 7 pg/ml post-**T3**). **T3** administration resulted in an increase in plasma glucose (from 83 +/- 5 to 98 +/- 5 mg/dl; P less than 0.05), net glucose uptake by the forearm (from 250 +/- 90 to 712 +/- 60 nmol/100 ml forearm tissue X min; P less than 0.005) and glucose production (1.7 +/- 0.09 to 2.2 +/- 0.08 mg/kg X min; P less than 0.005), without a change in glucose clearance (2.1 +/- 0.02 vs. 2.0 +/- 0.02 ml/kg X min); the rate of conversion of [14C]alanine to [14C]glucose increased by 30% (0.56 +/- 0.03 to 0.74 +/- 0.03 mumol/ kg X min P less than 0.005). These values were associated with a 25% increase in blood lactate to 712 +/- 69 mumol/liter (P less than 0.05) and a 131% increase in lactate release across the forearm to 434 +/- 90 (P less than 0.005). Forearm release of alanine (96 +/- 29 nmol/100 ml forearm tissue X min) and glutamine (151 +/- 41 nmol/100 ml forearm tissue X min) increased by 90% (P less than 0.005 and P = 0.04, respectively), with no change in their concentrations. Forearm release of branched chain amino acids did not change, while those of their ketoacids, alpha-ketoisocaproate (KIC) and alpha-ketoisovalerate (KIV), doubled (to 64 +/- 9 mumol/liter for KIC and 39 +/- 6 mumol/liter for KIV; P less than 0.05). These were associated with a 45% increase in the branched chain amino acid levels and a 46% rise in both KIC and KIV levels to 41 +/- 9 and 28 +/- 7 mumol/liter, respectively (P less than 0.05). There was a concurrent significant (P less than 0.05) change in the arterial levels of **phenylalanine** (-32%),

tyrosine (-29%), threonine (-20%), glycine (-20%), and serine (-15%), without any change in their efflux across the forearm. The data indicate that a pharmacologically induced rise in **T3**, to levels comparable to those seen in hyperthyroidism, results in enhanced glucose production, with an increase in glucose uptake by the forearm. The former can be partially accounted for by an increase in hepatic gluconeogenesis, glycogenolysis, or possibly increased renal glucose production...

L55 ANSWER 22 OF 28 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 84046713 EMBASE
DOCUMENT NUMBER: 1984046713
TITLE: Responses of dairy cows to dietary aflatoxin: Concentration of blood serum constituents and hormones associated with liver-kidney dysfunction and maintenance of lactation.
AUTHOR: Applebaum R.S.; Marth E.H.
CORPORATE SOURCE: Department of Food Science, University of Wisconsin Madison, Madison, WI 53706, United States
SOURCE: European Journal of Applied Microbiology and Biotechnology, (1983) 18/6 (381-386).
CODEN: EJABDD
COUNTRY: Germany
DOCUMENT TYPE: Journal
FILE SEGMENT: 052 Toxicology
LANGUAGE: English
AB In the first part of this study, two fistulated Holstein cows in mid-lactation were given 13 mg of impure aflatoxin **B1** (AFB1) (aflatoxin **B1** plus other aflatoxins and metabolites produced by Aspergillus parasiticus in culture) for 7 days. Animals were bled daily and their blood was analyzed for serum glutamate-oxaloacetate transaminase, serum glutamate-pyruvate transaminase, alkaline phosphatase, gamma-glutamyl transpeptidase, bilirubin, cholesterol, triglycerides, total protein, blood urea nitrogen, creatinine, and uric acid. Concentrations of these constituents remained relatively unchanged during treatment. In the second part of the study, seven fistulated Holstein cows in mid-lactation were given daily doses of 13 mg of AFB1 for 7 days. Six animals received pure AFB1; one animal received impure AFB1. Amounts of four hormones [cortisol, **insulin**, thyroxine (T4), and triiodothyronine (**T3**)], hormone binding capacity for **T3** (T3U), and glucose in serum were monitored. The amount of **T3** and percent of T3U increased (12%) and decreased (4%), respectively, during treatment. No discernible changes in amounts of T4, cortisol, **insulin**, and glucose were observed in the animals receiving pure AFB1. However, glucose levels in serum of the animal receiving impure AFB1 decreased by 9% during treatment. This decrease in serum glucose level was accompanied by a reduction in the amount of milk produced. Overt signs indicative of ill-health were not apparent, and thus could not be related to changes in blood constituents measured.

L55 ANSWER 23 OF 28 MEDLINE DUPLICATE 12
ACCESSION NUMBER: 84049713 MEDLINE
DOCUMENT NUMBER: 84049713 PubMed ID: 6356931
TITLE: Direct anabolic effects of thyroid hormone on isolated mouse heart.
AUTHOR: Crie J S; Wakeland J R; Mayhew B A; Wildenthal K

24/28 CONT.

The END

CONTRACT NUMBER: HL-14706 (NHLBI)
SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (1983 Nov) 245 (5 Pt 1) C328-33.
Journal code: 0370511. ISSN: 0002-9513.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198312
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19831217

AB The direct effects of L-and D-triiodothyronine (**T3**) on cardiac protein metabolism were investigated using fetal mouse hearts in organ culture. This model allowed the production of "thyrotoxicosis" in isolated hearts in vitro in the absence of the usual systemic metabolic and hemodynamic effects of thyroid hormones. Hearts were studied during the first 24 h of **T3** exposure in culture, before changes in beating rate due to **T3** occurred. **Phenylalanine** release was decreased by 26 +/- 2.3% (P less than 0.001) by the optimal concentrations of **T3** (10(-7) to 10(-6) M). Changes were similar in the presence or absence of **insulin**. D-**T3** was also anabolic, decreasing **phenylalanine** release by 24 +/- 2.5% (P less than 0.001) at concentrations of 10(-6) to 10(-5) M. The L-isomer increased protein synthesis by 23 +/- 6.8% (P less than 0.05) and decreased protein degradation, as measured by **phenylalanine** release in the presence of cycloheximide, by 5 +/- 1.6% (P less than 0.01). The D-isomer also increased protein synthesis but had no measurable effect on protein degradation. We conclude that thyroid hormones can exert direct anabolic effects on heart in the absence of systemic hemodynamic and metabolic changes. These effects are mediated primarily through an acceleration of the rate of protein synthesis; in the case of L-**T3**, a small inhibition of proteolysis may also occur.

L55 ANSWER 24 OF 28 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 84020449 EMBASE
DOCUMENT NUMBER: 1984020449
TITLE: Direct anabolic effects of thyroid hormone on isolated mouse heart.
AUTHOR: Crie J.S.; Wakeland J.R.; Mayhew B.A.; Wildenthal K.
CORPORATE SOURCE: Department of Physiology, Pauline and Adolph Weinberger Laboratory for Cardiopulmonary Research, The University of Texas Health Science Center at Dallas, Dallas, TX 75235, United States
SOURCE: American Journal of Physiology - Cell Physiology, (1983) 14/3 (C328-C333).
CODEN: AJPCDD
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
002 Physiology
003 Endocrinology
029 Clinical Biochemistry
018 Cardiovascular Diseases and Cardiovascular Surgery
LANGUAGE: English

AB The direct effects of L-and D-triiodothyronine (**T3**) on cardiac protein metabolism were investigated using fetal mouse hearts in organ culture. This model allowed the production of 'thyrotoxicosis' in isolated hearts in vitro in the absence of the usual systemic metabolic and hemodynamic effects of thyroid hormones. Hearts were studied during the first 24 h of **T3** exposure in culture, before changes in beating rate due to **T3** occurred. **Phenylalanine** release was decreased by 26 .+-. 2.3% (P < 0.001) by the optimal concentrations of **T3** (10-7 to 10-6 M). Changes were similar in the presence or absence of **insulin**. D-**T3** was also anabolic, decreasing **phenylalanine** release by 24 .+-. 2.5% (P < 0.001) at concentrations of 10-6 to 10-5 M. The L-isomer increased protein synthesis by 23 .+-. 6.8% (P < 0.05) and decreased protein degradation, as measured by **phenylalanine** release in the presence of cycloheximide, by 5 .+-. 1.6% (P < 0.01). The D-isomer also increased protein synthesis but had no measurable effect on protein degradation. We conclude that thyroid hormones can exert direct anabolic effects on heart in the absence of systemic hemodynamic and metabolic changes. These effects are mediated primarily through an acceleration of the rate of protein synthesis; in the case of L-**T3**, a small inhibition of proteolysis may also occur.

L55 ANSWER 25 OF 28 MEDLINE DUPLICATE 13
ACCESSION NUMBER: 83238849 MEDLINE
DOCUMENT NUMBER: 83238849 PubMed ID: 6408111
TITLE: Whole body protein breakdown rates and hormonal adaptation in fasted obese subjects.
AUTHOR: Henson L C; Heber D
CONTRACT NUMBER: K04-HD-00442-01 (NICHD)
RR-00425-14 (NCRR)
SOURCE: JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, (1983 Aug) 57 (2) 316-9.
Journal code: 0375362. ISSN: 0021-972X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198308
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19830826

AB Fasting is known to result in marked decreases in urinary urea nitrogen excretion over a 7-day period. In the present studies, changes in whole body protein breakdown rates and in the circulating levels of a number of hormones involved in protein anabolism and catabolism were systematically studied in nine obese subjects after 12 h and after 7 days of fasting. Whole body protein breakdown rates, measured with a primed continuous infusion of L-[U-14C] **lysine**, were decreased after 7 days of fasting (1.54 +/- 0.12 g/kg . day) compared to those after 12 h of fasting (1.96 +/- 0.10 g/kg . day). Plasma **insulin** decreased and glucagon increased after 7 days of fasting, resulting in an increased glucagon to **insulin** molar ratio. Plasma cortisol, urinary free cortisol excretion, plasma rT3 levels, and branched chain amino acid levels increased after 7 days of fasting. Serum **lysine** levels, used for the calculations of whole body

protein breakdown rates, were not changed. We conclude: 1) decreased whole body protein breakdown contributes significantly to the decreased nitrogen excretion observed with fasting in obese subjects; and 2) a decrease in circulating levels of free **T3** may lead to this adaptive decrease in protein breakdown in fasted obese subjects, since the other hormones measured either did not change or changed in a catabolic direction.

L55 ANSWER 26 OF 28 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 79197728 EMBASE
DOCUMENT NUMBER: 1979197728
TITLE: Isolated ACTH deficiency and TSH deficiency in the adult.
AUTHOR: Burke C.W.; Rees L.H.; Moore R.A.; et al.
CORPORATE SOURCE: Radcliffe Infirm., Oxford, United Kingdom
SOURCE: Journal of the Royal Society of Medicine, (1979) 72/5 (328-335).
CODEN: JRSMD
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
003 Endocrinology
029 Clinical Biochemistry
006 Internal Medicine
LANGUAGE: English

AB A case of isolated ACTH deficiency presenting at age 51 and another of isolated TSH deficiency presenting at age 55 have been studied. Pituitary radiology was unequivocally normal in both patients. The patient with ACTH deficiency had a partial defect, subnormal levels of ACTH measured by cytochemical bioassay being detectable basally and increasing slightly after **insulin** hypoglycaemia (though undetectable by both N-terminal and C-terminal radioimmunoassay under all conditions). There was no ACTH response (measured by cytochemical bioassay) to **lysine** vasopressin. The adrenal response to exogenous 1-24 corticotrophin was normal (though delayed) and gonadotrophins were normal (menopausal), the HGH response to hypoglycaemia normal, basal and TRH-stimulated thyroid function normal, and prolactin and its response to TRH normal when the patient was on steroid replacement, though elevated when she was steroid-deficient. The presenting symptom was weight loss. The patient with TSH deficiency was asymptomatic. TSH levels (by radioimmunoassays employing different antisera and by cytochemical assay) were sometimes detectable, though total and free T4 and **T3** levels were subnormal. There was subnormal TSH response to TRH injection on several occasions, and only a very small TSH response to twice-daily ingestion of TRH (40 mg twice daily by mouth) over three weeks. Gonadotrophins and their response to LHRH, growth hormone and cortisol and their response to hypoglycaemia, and prolactin and its response to TRH were all normal. This patient also had TBG deficiency. Autoantibodies directed against pituitary tissue were not detected in either case. The defects may lie in the pituitary rather than the hypothalamus, because of the failure to respond to pituitary stimulation, but immunofluorescence and electron microscopic study of pituitary cells would give more conclusive information on the aetiology.

L55 ANSWER 27 OF 28 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 80030186 EMBASE

DOCUMENT NUMBER: 1980030186
TITLE: Effect of cyproterone acetate (CA) on growth and endocrine function in precocious puberty.
AUTHOR: Stahnke N.; Ilicki A.; Willig R.P.
CORPORATE SOURCE: Dept. Paed., Univ. Hosp., Hamburg, Germany
SOURCE: Acta Paediatrica Scandinavica, (1979) 68/Suppl. 277 (32-40).
CODEN: APSVAM
COUNTRY: Sweden
DOCUMENT TYPE: Journal
FILE SEGMENT: 038 Adverse Reactions Titles
037 Drug Literature Index
007 Pediatrics and Pediatric Surgery
003 Endocrinology
030 Pharmacology
LANGUAGE: English

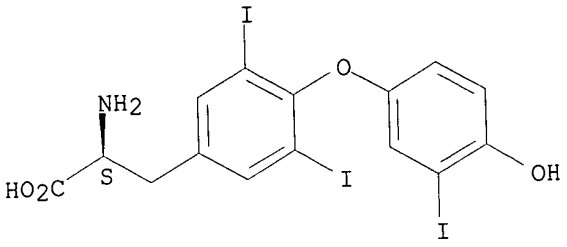
AB 16 girls with precocious puberty have been studied. Following low dosage cyproterone acetate (CA) therapy (mean daily dosage 65 mg/m2BSA), a beneficial effect on growth and skeletal maturation was observed. During high dosage therapy (150 mg/m2 per day) endocrinological studies were performed in 10 of these patients. There was no significant difference in HGH levels (**insulin** - and arginine-test), **T3** and TSH values (TRH-test) between patients and controls. T4 concentration was significantly increased. Basal prolactin levels and prolactin response to TRH was definitely elevated. Oral glucose load and arginine infusion resulted in a significantly enhanced **insulin** release. There was a significant reduction in basal LH levels and an increase in FSH response to LH-RH. Basal and diurnal plasma cortisol values were markedly reduced and the cortisol release due to corticotrophin injection, **lysine** vasopressin (LVP) injection and **insulin**-hypoglycemia as well. A definite increase in basal ACTH levels was observed, during LVP- and **insulin** -hypoglycemia test ACTH concentrations were within or significantly above normal range. In our patients, a primary adrenocortical insufficiency due to CA treatment was evident.

L55 ANSWER 28 OF 28 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 74172446 EMBASE
DOCUMENT NUMBER: 1974172446
TITLE: Endocrine function in an anencephalic infant.
AUTHOR: Allen J.P.; Greer M.A.; McGilvra R.; et al.
CORPORATE SOURCE: Dept. Med., Univ. Oregon Med. Sch., Portland, Ore. 97201, United States
SOURCE: Journal of Clinical Endocrinology and Metabolism, (1974) 38/1 (94-98).
CODEN: JCEMAZ
DOCUMENT TYPE: Journal
FILE SEGMENT: 003 Endocrinology
007 Pediatrics and Pediatric Surgery
023 Nuclear Medicine
LANGUAGE: English

AB The endocrine function in a fullterm 2.1 kg female anencephalic infant was studied by measuring immunoreactive ACTH, growth hormone, **insulin**, TSH, T4, and **T3** concentrations in umbilical cord blood and serial venous plasma samples obtained at 10-30 min intervals until death. In addition, plasma cortisol and T4 concentrations were determined by competitive protein binding. The

following materials were given: TRF (100 mg, iv) at 86 mins; **lysine** vasopressin (LVP) (2.5U, iv) at 125 mins; .alpha.(1-24) ACTH (1 mg, im) at 160 min; and TSH (5U, im) at 221 min. Plasma TSH and ACTH concentrations were low in the infant until stimulation by TRF and LVP, respectively. Plasma TSH and ACTH concentrations then increased significantly. There were no corresponding changes in plasma T4, **T3**, or cortisol concentrations following the elevation in plasma TSH and ACTH concentration. A spike in plasma **insulin** concentration occurred following injection of vasopressin with a subsequent fall in the plasma glucose concentration. These data indicate that the adenohypophysis of this anencephalic infant contained a readily dischargeable pool of TSH and ACTH. Endogenous secretion or exogenous administration of these tropic hormones did not result in the expected secretory response by their respective target plans presumably due to functional atrophy of the latter. Growth hormone was presumably secreted in significant quantities despite absence of the hypothalamus.

FILE 'HOME' ENTERED AT 15:57:01 ON 05 MAR 2003



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 17 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:713607 HCAPLUS
DOCUMENT NUMBER: 128:32931
TITLE: Effects of dipeptides administered to a perfused area of the skin in Angora goats
AUTHOR(S): Pierzynowski, S. G.; Puchala, R.; Sahlu, T.
CORPORATE SOURCE: E (Kika) de la Garza Institute for Goat Research, Langston University, Langston, OK, 73050, USA
SOURCE: Journal of Animal Science (1997), 75(11), 3052-3056
CODEN: JANSAG; ISSN: 0021-8812
PUBLISHER: American Society of Animal Science
DOCUMENT TYPE: Journal
LANGUAGE: English

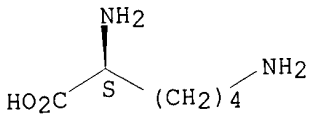
AB The effect of dipeptide infusion on mohair growth of Angora goats was investigated using a skin perfusion technique. Six Angora wethers (body wt. 32 .+-. 2 kg) were implanted bilaterally with silicon catheters into the superficial branches of the deep circumflex iliac artery and to the deep circumflex iliac vein. For the first 14 d of the expt., animals received infusions into the deep circumflex iliac arteries of either a mixt. of Met-Leu and **Lys**-Leu dipeptides (one side) or saline (other side). Infusion rates were 0.72 mg of each dipeptide per h. The area of skin supplied by the deep circumflex iliac artery was approx. 300 cm2. An area of 150 cm2 within the perfused region was used to det. the mohair growth. Two weeks after the cessation of infusions, perfused areas were shorn, and greasy and clean mohair prodn., staple length, and diam. were detd. Greasy and clean mohair prodn. from the perfused region were increased by the dipeptide infusion compared to the side infused with saline (1.91 vs. 1.66 g and 1.56 vs. 1.31 g, resp.). No significant changes were obsd. in mohair diam.; however, staple length tended to increase as a result of dipeptide infusion (18.0 vs. 16.1). Decreased concns. of amino acids Met, Cys, **Lys**, **Phe**, Val, Ileu, Leu, and Arg were obsd. in the venous blood taken from the deep circumflex iliac vein on the side infused with the dipeptide mixt. compared with blood taken from the saline side. There were no treatment differences in triiodothyronine, thyroxine, or **insulin** concns. in venous blood taken from the deep circumflex iliac vein. Direct skin infusion with dipeptides may have resulted in

mobilization of amino acids for increased protein synthesis, or the infused dipeptides may have acted as growth promoters stimulating skin amino acid uptake and protein synthesis.

IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, L-**Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(dipeptides skin perfusion effects on mohair growth in Angora goats)

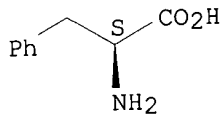
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



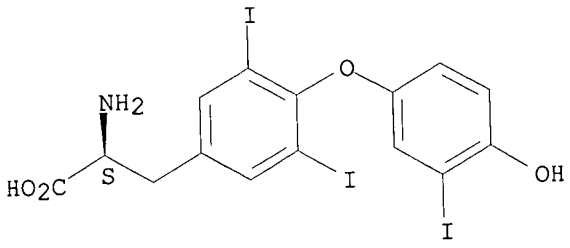
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 18 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:701885 HCAPLUS
DOCUMENT NUMBER: 127:328691

TITLE: Immortalized human colon epithelial cell lines
INVENTOR(S): Blum, Stephanie; Pfeifer, Andrea; Troumvoukis, Yvonne
PATENT ASSIGNEE(S): Societe Des Produits Nestle S.A., Switz.
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

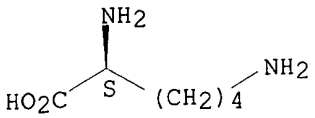
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 802257	A1	19971022	EP 1996-201064	19960419
EP 802257	B1	20020821		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV				
AT 222598	E	20020915	AT 1996-201064	19960419
CA 2202923	AA	19971019	CA 1997-2202923	19970416
FI 9701628	A	19971020	FI 1997-1628	19970417
NO 9701757	A	19971020	NO 1997-1757	19970417
AU 9718933	A1	19971023	AU 1997-18933	19970417
US 6194203	B1	20010227	US 1997-839271	19970417
JP 10028580	A2	19980203	JP 1997-102172	19970418
US 6395542	B1	20020528	US 2000-593134	20000614
US 6399381	B1	20020604	US 2000-593135	20000614
PRIORITY APPLN. INFO.:			EP 1996-201064	A 19960419
			US 1997-839271	A3 19970417
			US 1998-6886	B3 19980114

AB The title immortalized cell lines, which do not express tumor markers but do express metabolic markers specific to nonimmortalized human epithelial cells and metabolic markers of differentiation specific to nonimmortalized human colon epithelial cells and to which the lactic acid bacteria strain CNCM-1225 can adhere in vitro, are disclosed. Serum-free culture medium is provided that contains trace elements, vitamin C, retinoic acid, T3, dexamethasone, hydrocortisone, bovine pituitary gland ext., **insulin**, EGF, and transferrin. In the immortalization process, a culture of primary epithelial cells from human colon is prepd., the culture is then infected with a recombinant virus, and the immortalized cells are cultured in the serum-free medium described. A process also is disclosed to identify the mutagenic, toxic, or beneficial effect of an agent on the metab. of cells of the intestinal tract in which (1) an agent suspected of being mutagenic, toxic, or beneficial to the metab. of the cells of the intestinal tract is incubated with a cell line of the invention and (2) and the effects of such an agent on the cell line are measured. The cells of the invention also may be used as the active drug agent. A diagnostic kit is provided that contains the immortalized colon epithelial cells of the invention, serum-free culture medium, and reagents to det. the metabolic response of the cells to a mutagenic, toxic, or beneficial agent.

IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, L-**Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**,
Insulin, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(immortalized human colon epithelial cell lines)

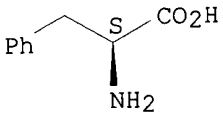
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



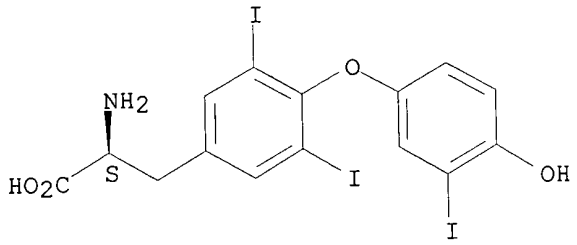
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 19 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	1997:49264 HCAPLUS
DOCUMENT NUMBER:	126:162257
TITLE:	Compositions and methods for treating wounds
INVENTOR(S):	Lindenbaum, Ella
PATENT ASSIGNEE(S):	Life Medical Sciences, Inc., USA
SOURCE:	U.S., 30 pp., Cont.-in-part of U.S. Ser. No. 25,216, abandoned. CODEN: USXXAM
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	3
PATENT INFORMATION:	

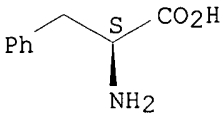
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5591709	A	19970107	US 1995-374944	19950118
US 5461030	A	19951024	US 1993-158808	19931129
PRIORITY APPLN. INFO.:			US 1991-752849 B1	19910830
			US 1992-937486 B2	19920828
			US 1993-25216 B2	19930302
			US 1993-158808 A2	19931129
			IL 1991-97127 A	19910201

AB The present invention relates to wound treatment formulations and methods for treating wounds utilizing these formulations. The formulations are useful for treating wounds by accelerating wound healing. These formulations generally comprise an effective amt. of a non-steroidal anabolic hormone such as **insulin**, growth hormone, triiodothyronine, thyroxine or mixts. thereof, in combination with a cellular nutrient medium, preferably MCDB 153. Thus, 100 g of lyophilized powder of MCDB 153 was reconstituted with water and supplemented with human growth hormone to final concn. of 0.5-2 ng/mL. **Insulin**-transferrin was added to final concn. of .apprx.5 .mu.g/mL and collagen or gelatin at 1 % concn. was added to provide a gel for delivery to wounds as indicated.

IT **63-91-2, Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**,
Insulin, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical gels contg. hormones and active agents in combination with cellular nutrient medium for wound treatment)

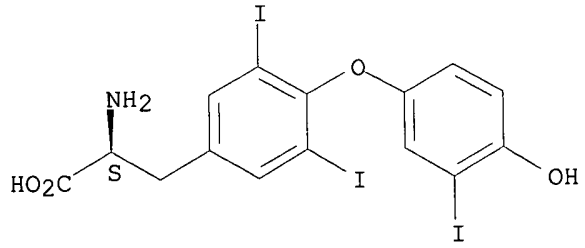
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS

CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

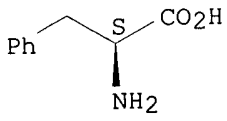
L42 ANSWER 20 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:451113 HCAPLUS
DOCUMENT NUMBER: 125:133275
TITLE: The influence of peritoneally injected **phenylalanine** on **insulin** secretion and level of thyroid hormones and some biochemical parameters in blood, liver and muscles in rats
AUTHOR(S): Mackowiak, Pawel; Mikusik, Malgorzata
CORPORATE SOURCE: Pol.
SOURCE: Roczniki Akademii Rolniczej w Poznaniu (1994), 265, 47-52
CODEN: RARPCF
PUBLISHER: Wydawnictwo Akademii Rolniczej w Poznaniu
DOCUMENT TYPE: Journal
LANGUAGE: Polish

AB L-**Phenylalanine**, given peritoneally, does not show **insulin**-secretional properties, but enhances levels of thyroxine and triiodothyronine in rat blood. Simultaneously, the investigated amino acid enhances concn. of glucose and urea in blood and glycogen in liver and muscles. Obtained results indicate also the possibility of other hormones to be released, and so, changes in some biochem. parameters (glucose, glycogen) in blood, liver, and muscles are not only the result of increased **insulin** level but their source is rather a multi-hormonal interaction.

IT **63-91-2**, **Phenylalanine**, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(the influence of peritoneally injected **phenylalanine** on **insulin** secretion and levels of thyroid hormones and some biochem. parameters in blood, liver and muscles in rats)

RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

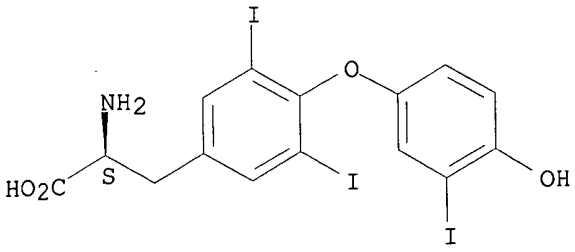
Absolute stereochemistry. Rotation (-).



IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(the influence of peritoneally injected **phenylalanine** on **insulin** secretion and levels of thyroid hormones and some biochem. parameters in blood, liver and muscles in rats)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 21 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:441065 HCAPLUS
DOCUMENT NUMBER: 125:109689
TITLE: Human liver epithelial cell line and culture media for this cell line
INVENTOR(S): Cole, Katharine H.; Lechner, John F.; Reddel, Roger; Harris, Curtis C.; Pfeifer, Andrea M.
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA
SOURCE: U.S., 16 pp., Cont.-in-part of U.S. 5,342,777. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5529920	A	19960625	US 1992-879165	19920501
US 284331	A0	19890615	US 1988-284331	19881214
US 5342777	A	19940830	US 1992-844873	19920303
US 5665589	A	19970909	US 1993-25336	19930303
WO 9420607	A1	19940915	WO 1994-US1910	19940303
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9463516	A1	19940926	AU 1994-63516	19940303
EP 687294	A1	19951220	EP 1994-910730	19940303
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5759765	A	19980602	US 1995-458878	19950602

PRIORITY APPLN. INFO.:

US 1988-284331	B1	19881214
US 1988-284368	B1	19881214
US 1989-377967	B1	19890711
US 1992-844873	A2	19920303
US 1992-879165	A2	19920501
US 1993-25336	A	19930303
WO 1994-US1910	W	19940303

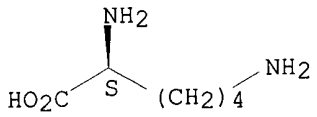
AB The present invention relates to long-term multiplication and permanent establishment of a cell line of human liver epithelial cells (hepatocytes). The human liver epithelial cell line is

capable of mitotically proliferating and continuously growing in vitro under suitable environmental conditions in suitable culture media. A method of producing an immortalized human liver epithelial cell line is also disclosed. The invention also relates to serum-free cell medium developed to support long-term multiplication and permanent establishment of a cell line of human liver epithelial cells. The medium may contain an effective cell growth-promoting amt. of calcium ions; an effective cell growth-promoting amt. of glucose; an effective amt. of **insulin** to aid cells in glucose uptake; an effective cell growth-promoting amt. of hydrocortisone; an effective amt. of epidermal growth factor to bind epidermal growth factor receptors on cells; an effective amt. of transferrin to increase DNA synthesis in cells; an effective amt. of cholera toxin to increase DNA synthesis in cells; an effective amt. of triiodothyronine to increase DNA synthesis in cells; and an effective growth-promoting amt. of mammalian hormones and mitogenic factors, including lipoprotein, cholesterol, phospholipids, and fatty acids.

IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, **Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**,
Insulin, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(human liver epithelial cell line and culture media for it)

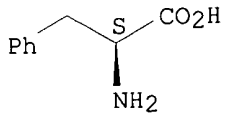
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



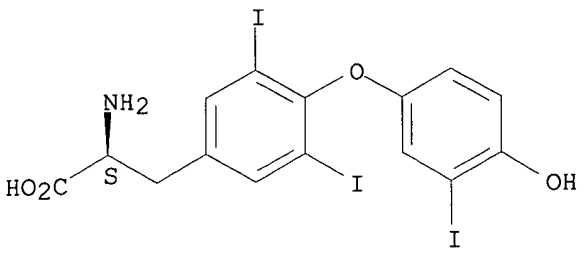
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 22 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:190612 HCAPLUS
DOCUMENT NUMBER: 124:259543
TITLE: Metabolic and endocrine changes induced by chronic heat exposure in broiler chickens: biological and endocrinological variables
AUTHOR(S): Geraert, P. A.; Padilha, J. C. F.; Guillaumin, S.
CORPORATE SOURCE: Station de Recherches Avicoles, Institut National de la Recherche Agronomique, Nouzilly, 37380, Fr.
SOURCE: British Journal of Nutrition (1996), 75(2), 205-16
CODEN: BJNUAV; ISSN: 0007-1145
PUBLISHER: Cambridge University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The present study was designed to investigate the effect of chronic heat exposure (32.degree. const.) on plasma metabolites and hormone concns. in broiler chickens. At 2 and 4 wk of age, fifty-four male Shaver broiler chickens were allocated to one of three treatments: 22.degree., ad lib. feeding (22AL), 32.degree., ad lib. feeding (32AL) and 22.degree., pair-feeding with the 32AL group (22PF). Ambient temp. was kept const. at either 22 or 32.degree. for 2 wk. Plasma glucose, triacylglycerols, phospholipids, non-esterified fatty acids (NEFA), individual amino acids, uric acid, **insulin**, triiodothyronine (T3), thyroxine, corticosterone were detd. Sensitivity to exogenous **insulin** was also measured at 7 wk of age. At 4 and 6 wk of age, i.e. after 2 wk at high ambient temp., fasted 32AL chickens displayed similar concns. of glucose and triacylglycerols to those of 22AL birds. When fed, 32AL chickens exhibited higher plasma levels of glucose and decreased concns. of NEFA and amino acids. Feed restriction resulted in intermediate values. Concns. of all plasma free amino acids were decreased under heat exposure except for aspartic acid, glutamic acid and **phenylalanine**. At 6 wk of age, plasma T3 was reduced irresp. of the nutritional state, while plasma corticosterone concns. were increased in 32AL birds compared with 22Al birds. Heat exposure did not change plasma **insulin** concns. in either fasted or fed chickens. The 32Al chickens displayed significantly reduced sensitivity to exogenous

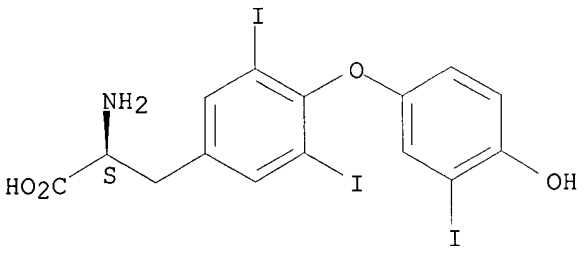
insulin when fasted, but an enhanced response to **insulin** when fed, compared with both 22.degree. groups. Such endocrinol. changes could stimulate lipid accumulation through increased de novo lipogenesis, reduced lipolysis and enhanced amino acid catabolism under chronic heat exposure.

IT **6893-02-3**, Triiodothyronine
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolic and endocrine changes induced by chronic heat exposure in broiler chickens)

RN 6893-02-3 HCAPLUS

CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L42 ANSWER 23 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:135028 HCAPLUS

DOCUMENT NUMBER: 124:223282

TITLE: Effects of mimosine administered to a perfused area of skin in Angora goats

AUTHOR(S): Puchala, R.; Pierzynowski, S. G.; Sahlu, T.; Hart, S. P.

CORPORATE SOURCE: E. (Kika) de la Garza Institute Goat Res., Langston Univ., Langston, OK, 73050, USA

SOURCE: British Journal of Nutrition (1996), 75(1), 69-79
CODEN: BJNUAV; ISSN: 0007-1145

PUBLISHER: Cambridge University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

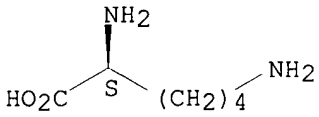
AB The effect of mimosine on a perfused area of skin tissue was studied using an isolated perfusion technique. Four mature Angora wethers (body wt. 35 (SE 2.3) kg) were cannulated bilaterally with indwelling silicone catheters in the superficial branches of the deep circumflex iliac artery and vein. Mimosine (40 mg/kg metabolic wt. (W0.75) per d) was infused intra-arterially into one iliac artery of each goat for 3 d and saline was infused in the contralateral (control) iliac artery. Iliac venous blood samples were taken from both sides along with arterial samples from the carotid artery. Mimosine infusion elevated plasma mimosine in the carotid artery (52.cntdot.6 (SEM 19.cntdot.21) .mu.mol/l) and iliac vein on the saline-treated side to 54.cntdot.1 (SEM 16.cntdot.31) .mu.mol/l and in the iliac vein on the mimosine-treated side to 191.cntdot.3 (SEM 19.cntdot.14) .mu.mol/l ($P < 0.cntdot.01$). Mimosine decreased feed intake (2.cntdot.3 v. 0.cntdot.6 kg/d, SEM

0.cntdot.29; P <0.cntdot.001) and water consumption (5.cntdot.2 v. 1.cntdot.3 L/d, SEM 0.cntdot.67; P <0.cntdot.001). Mimosine did not cause defleecing in the area of infusion and was cleared from the bloodstream within 12 h of cessation of infusion. The following effects were also obsd. during mimosine infusion; decrease in plasma amino acids to half pre-infusion values (methionine 22.cntdot.7 v. 13.cntdot.1 .mu.mol/L, SEM 1.cntdot.41; **lysine** 95.cntdot.9 v. 37.cntdot.4 .mu.mol/L, SEM 4.cntdot.28; P <0.cntdot.001); decreases in plasma triiodothyronine (1495 v. 695 ng/L, SEM 43.1; P <0.cntdot.001), thyroxine (61.cntdot.5 v. 19.cntdot.5 .mu.g/L, SEM 1..cntdot.; P < 0.cntdot.001) and **insulin** (28.cntdot.7 v. 17.cntdot.3 .mu.IU/mL, SEM 1.cntdot.89; P < 0.cntdot.01) concns.; increase in plasma cortisol (14 v. 62 .mu.g/I, SEM 0.cntdot.35; P <0.cntdot.001) concn.; decreases in levels of plasma Zn and Mg (0.cntdot.97 v. 0.cntdot.49 mg/L, SEM 0.cntdot.063; P <0.cntdot.001 and 21.cntdot.4 v. 14.cntdot.6 mg/L, SEM 1.cntdot.74; P <0.cntdot.001 resp.). All reported variables returned to their normal values 24 h after cessation of mimosine infusion except feed intake which was affected for a longer period. Mohair length and diam. were not affected by mimosine infusion. The toxicity of mimosine may be due to the drastic depletion of Zn and Mg in the blood as mimosine possesses very strong chelating properties and is excreted in the urine as a chelate.

IT **56-87-1, Lysine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(of blood plasma; mimosine metab. and toxicity in Angora goats)

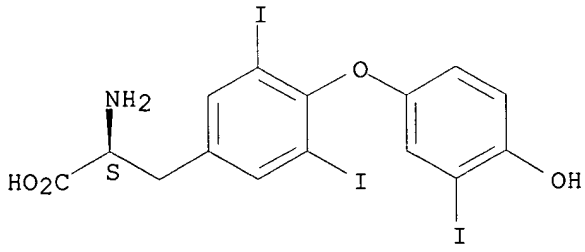
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS

CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 24 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:682645 HCAPLUS
DOCUMENT NUMBER: 123:77789
TITLE: Polymer modification and reaction of sulfonate ester-activated polymer with target material
INVENTOR(S): Francis, Gillian Elizabeth; Fisher, Derek; Delgado, Cristina; Malik, Farooq
PATENT ASSIGNEE(S): Royal Free Hospital School of Medicine, UK
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9506058	A1	19950302	WO 1994-GB1844	19940823
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 714402	A1	19960605	EP 1994-924920	19940823
EP 714402	B1	20001115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09504515	T2	19970506	JP 1994-507430	19940823
EP 1026171	A1	20000809	EP 2000-105847	19940823
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 197589	E	20001215	AT 1994-924920	19940823
ES 2151558	T3	20010101	ES 1994-924920	19940823

PRIORITY APPLN. INFO.:

GB 1993-17618	A	19930824
EP 1994-924920	A3	19940823
WO 1994-GB1844	W	19940823

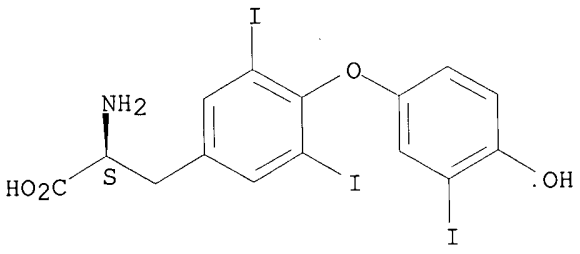
AB A process for producing adducts of a polymer and a target material which process comprises the steps of (a) reacting either (i) an activating compd. of formula (I) X-AM (where AM is an activating sulfonyl ester moiety optionally bearing a group for covalent bonding to a solid support) with a polymer of formula (II), (C)c POL - Gg (where POL is a polymer moiety of valency c+g, C is a capping group and c is zero or a no., and G is a terminal hydroxyl group reactive with compd. of formula I and g is a pos. no.) so as to form (ii) a sulfonate ester-activated polymer of formula (III) (C)c POL - (AM)g. (B) reacting the sulfonate ester-activated polymer of formula (III) of (III') with the target material. (C) recovering the adduct of the polymer and the target material, in which process: (i) the polymer of formula (II) is dry as detd. by benzene distn., (ii) the reaction of the compd. of formula (I) of (I') with the polymer of formula (II) is conducted in an org. solvent which is inert to the reagents and to the product of formula (III) or (III') and is anhyd. as obtainable using mol. sieves of 0.3 nm; (iii) the reaction of the compd. of formula (I) or (I') with the polymer of formula (II) is conducted in a reaction vessel from which water is excluded; (i.v.) the sulfonate ester-activated polymer of formula

(III) or (III') so produced is recovered and either used directly in step (b) or stored, prior to use in step (b), in the presence of a desiccating agent more hygroscopic than the product of formula (III) or (III'). And (v) the reaction of the sulfonate water-activated polymer with the target material is conducted in a non-denaturing medium and non-denaturing temp. with respect to the target material. The reaction of the sulfonate ester-activated polymer with the target material is conducted in a non-denaturing medium and non-denaturing temp. with respect to the target material. For example, the activating moiety -AM of formula I is selected from 2,2,-trifluoroethanesulfonyl, pentafulorobenzenesulfonyl, fluorosulfonyl, 2,4,5-trifluorobenzenesulfonyl groups, etc. For example, the polymer is selected from poly(oxymethlene), polyethyleneglycols, methoxypolyethyleneglycols, polysaccharides, etc. The modification target can be proteins (e.g. interleukins, erythropoietin, amphiregulin, etc.), antibodies, and enzymes, etc.

IT **6893-02-3**, Triiodothyronine
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymer modification method and reaction of sulfonate ester-activated polymer with target material)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L42 ANSWER 25 OF 54 HCAPLUS COPYRIGHT 2003 ACS 4

ACCESSION NUMBER:	1995:535066 HCAPLUS
DOCUMENT NUMBER:	123:6817
TITLE:	**Insulin** sensitivity, hormonal levels and skeletal muscle protein metabolism in tumor-bearing exercising rats
AUTHOR(S):	Daneryd, P.; Hafstroem, L.; Svanberg, E.; Karlberg, I.
CORPORATE SOURCE:	Department Surgery, Sahlgrenska Hospital, Goeteborg, S-413 45, Swed.
SOURCE:	Eur. J. Cancer, Part A (1995), 31A(1), 97-103 CODEN: EJCTEA
DOCUMENT TYPE:	Journal
LANGUAGE:	English

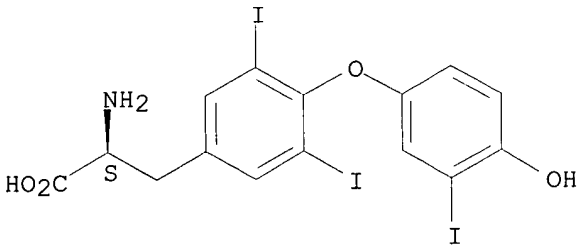
AB We have previously shown that spontaneous phys. exercise can delay onset of exptl. anorexia and cachexia, and retard tumor growth; we now report the effects on **insulin** sensitivity, hormonal levels and skeletal muscle protein metab. **Insulin** sensitivity detd. with a euglycemic hyperinsulinemic clamp revealed a normalized glucose disposal rate in tumor-bearing exercising (TBE)

vs. sedentary (TBS) animals (TBE 15.55 .+-. 2.71 vs. TBS 2.47 .+-. 2.12 mg/kg/min; P < 0.05). Both TBE and TBS animals had decreased levels of corticosterone during the clamp. Serum levels of **insulin** during tumor progression were unaffected by exercise, but the **insulin**: glucagon ratio increased and the progressive decrease in rT3 was attenuated. The concn. of glucagon decreased in both tumor-bearing groups during the expt., while TBE animals showed a relative redn. in corticosterone. Capacity for skeletal muscle protein synthesis, expressed as RNA: protein ratio, was normalized in TBE animals in two tumor protocols (TBE 5.9 .+-. 0.6 vs. TBS 4.7 .+-. 0.3; TBE 2.9 .+-. 0.4 vs. TBS 1.8 .+-. 0.2; P < 0.05, resp.). Incorporation rate of 14C-**phenylalanine** into skeletal muscle protein was increased in the TBE group in vitro and in vivo. In the postexercise period, protein degrdn. evaluated by tyrosine release in vitro was increased, but decreased over time. This study has confirmed a pos. skeletal muscle protein balance in exercising tumor-bearing animals, partly explained by the increased **insulin** sensitivity. This conclusion was further supported by the less catabolic pattern indicated by hormonal levels.

IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(**insulin** sensitivity, hormonal levels and skeletal muscle protein metab. in tumor-bearing exercising rat)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 26 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:513249 HCAPLUS
DOCUMENT NUMBER: 123:8487
TITLE: Growth and metabolism in calves after implantation of complex substrate granules
AUTHOR(S): Shamberev, Yu. N.; Ivanov. I. S.; Gavrishchuk, V. I.; Netesa, Yu. I.; Kalinina, K. N.; Zakharova, I. E.
CORPORATE SOURCE: Timiryazev. S-Kh. Akad., Moscow, Russia
SOURCE: Izvestiya Timiryazevskoi Sel'skokhozyaistvennoi

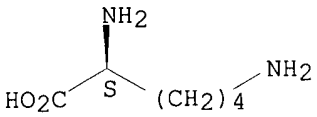
Akademii (1994), (4), 123-37
CODEN: ITSAA7; ISSN: 0021-342X
PUBLISHER: Izdatel'stvo MSKhA
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The effect of implanting the std. growth-stimulating prepn. **lysine** and the complex prepn. (**lysine** + beebread) on the endocrine system, metab., and growth of milk-fed calves was studied. The prepns. intensified the anabolic processes, increased av. daily wt. gains and growth of animals, elevated the level of free **insulin** in blood, and improved the resistance of calves to diseases. These phenomena were more expressed in animals that received implantants contg. up to 60% of beebread.

IT **56-87-1, Lysine,** biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(**lysine** and beebread growth stimulant implantation to calves effect on metab. and growth and immunity)

RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

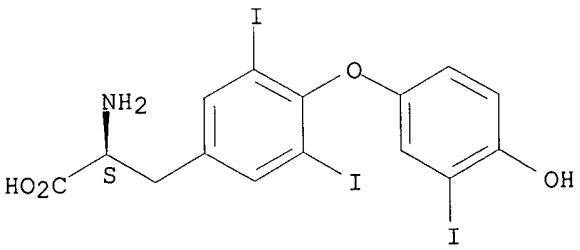
Absolute stereochemistry.



IT **6893-02-3,** Triiodothyronine **9004-10-8, Insulin,** biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**lysine** and beebread growth stimulant implantation to calves effect on metab. and growth and immunity)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 27 OF 54 HCAPLUS COPYRIGHT 2003 ACS

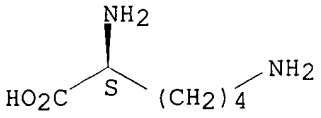
ACCESSION NUMBER: 1995:353217 HCAPLUS
DOCUMENT NUMBER: 122:131836
TITLE: Effects of amino acids administered to a perfused area of the skin in Angora goats
AUTHOR(S): Puchala, R.; Sahlu, T.; Pierzynowski; Hart, S. P.
CORPORATE SOURCE: Garza Institute for Goat Research, Langston Univ., Langston, OK, 73050, USA
SOURCE: Journal of Animal Science (1995), 73(2), 565-70
CODEN: JANSAG; ISSN: 0021-8812
PUBLISHER: American Society of Animal Science
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of infusion of supplemental amino acids on growth of mohair by Angora goats was investigated using a skin perfusion model. Four Angora wethers (av. BW 32 .+-. 2 kg) were implanted bilaterally with silicon catheters into the superficial branches of the deep circumflex iliac artery and vein. For the first 14 d of the expt., goats were arterially infused with either a mixt. of amino acids (one side) or saline (contralateral side). The hourly infusion rates of amino acids were .36 mg of methionine, .36 mg of **lysine**, and .72 mg of leucine. The area of skin supplied by the deep circumflex iliac artery was approx. 300 cm2; a tattoo 10 cm .times. 15 cm was made in the middle of the perfused region for quantifying mohair prodn. and characteristics. Two weeks after cessation of infusions goats were shorn and the mohair from the tattooed regions was examd. Greasy and clean mohair prodn. from the tattooed region were increased by amino acid infusion compared with the contralateral side infused with saline. Although mohair length and diam. were not significantly altered, venous concns. of valine, threonine, arginine, glycine, and histidine were decreased by infusion of the amino acids, no differences in T3, T4, or **insulin** concns. in venous blood were detected, but plasma cortisol concn. was reduced (1.38 vs 2.61 .mu.g/dL) with amino acid infusion. Supplemented amino acids were extensively utilized by perfused areas of skin, resulting in the increase in mohair prodn.

IT **56-87-1**, **Lysine**, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(amino acids administered to a perfused area of the skin effect on mohair prodn. in Angora goats)

RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

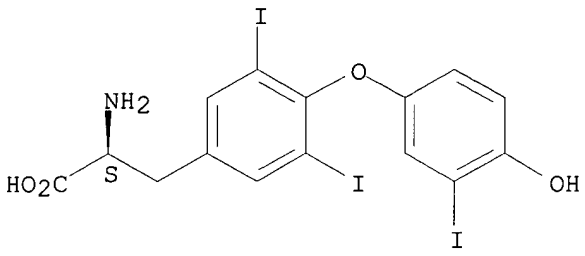
Absolute stereochemistry.



IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(amino acids administered to a perfused area of the skin effect

on serum compn. in Angora goats)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

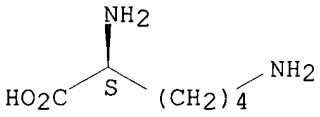
L42 ANSWER 28 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:286155 HCAPLUS
DOCUMENT NUMBER: 122:102594
TITLE: Metabolic, endocrine and hematological responses to intravenous E. coli endotoxin administration in 1-week-old calves
AUTHOR(S): Kinsbergen, M.; Bruckmaier, R. M.; Blum, J. W.
CORPORATE SOURCE: Institute Animal Breeding, University Bern, Bern, CH-3012, Switz.
SOURCE: Journal of Veterinary Medicine, Series A (1994), 41(7), 530-47
CODEN: JVMAE6; ISSN: 0931-184X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Responses to i.v. injected E. coli endotoxin (E), followed by saline infusion, as compared with saline infusion alone, were studied for 24 h in 1-wk-old calves. After administration of E, respiratory rate (RR), heart rate (HR), rectal temp. (RT), serum iron, **insulin**, (I), cortisol and tumor necrosis factor-.alpha., transiently, and urea, continuously, increased. Isoleucine and leucine became elevated at 24 h, whereas white-blood-cell no., free fatty acids (FFA) and triglycerides (TG) increased after an initial fall. After administration of E, packed-cell vol., erythrocyte no., Hb, glucose (G), cholesterol, phospholipids (PL), **lysine**, arginine, proline, citrulline, calcium (Ca), inorg. phosphorus, **insulin**-like growth factor I (IGF-I) and 3,5,3"-triiodothyronine (T3) concns. and alk. phosphatase (AP) and .gamma.-glutamyl transferase (.gamma.GT) activities increased significantly while growth hormone decreased non-significantly. When saline was infused alone, G, TG, PL, Ca, AP, .gamma.GT, I, IGF-I and T3 decreased, while FFA, urea and sodium increased, but, changes of G, urea, AP, IGF-I and T3 were less marked than after injection of E. Potassium, total protein and albumin concns., and glutamyl dehydrogenase and glutamate oxalacetate transaminase activities were not significantly affected by either treatment. In

conclusion, metabolic and endocrine changes during saline infusion alone were typical for food withdrawal. Changes of variables after administration of E were transient, biphasic or sustained, thus expressing complex interactions between metabolic parameters, endocrine factors and cytokines.

IT **56-87-1, Lysine**, biological studies
6893-02-3, T3 **9004-10-8, Insulin**,
biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(effect of Escherichia coli endotoxin administration on metabolic, endocrine and hematol. responses in newborn cattle)

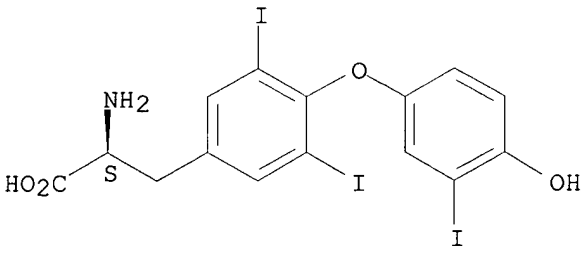
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 29 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:76210 HCAPLUS
DOCUMENT NUMBER: 120:76210
TITLE: Protein and energy relationships in the broiler chicken. 11. Effects of protein quantity and quality on metabolism
AUTHOR(S): Rosebrough, R. W.; McMurtry, J. P.
CORPORATE SOURCE: Beltsville Agric. Res. Cent., Agric. Res. Serv., Beltsville, MD, 20705, USA
SOURCE: British Journal of Nutrition (1993), 70(3), 667-78
CODEN: BJNUAV; ISSN: 0007-1145
DOCUMENT TYPE: Journal

LANGUAGE: English

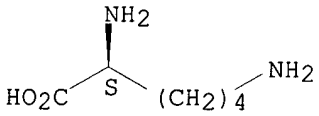
AB Male broiler chickens growing from 7 to 35 d were fed on a diet contg. 150 g crude protein (N .times. 6.25)/kg diet supplemented with **lysine** to equal that in diets contg. 166, 183 and 200 g crude protein/kg diet (Expt 1). A second group of male broiler chickens growing over the same period were fed on a diet contg. 120 g crude protein/kg supplemented with **lysine**, arginine, tryptophan, threonine and isoleucine equal to that in diets contg. 144, 172 and 200 g crude protein/kg diet (Expt 2). Growth was improved by **lysine** supplementation but not to the level attained by feeding 200 g crude protein/kg (Expt 1). **Lysine**, arginine, tryptophan, threonine and isoleucine supplementation of a low-protein diet also improved growth, but growth again fell short of that attained by feeding a diet contg. 200 g crude protein/kg. Plasma **insulin**-like growth factor-1 and thyroxine concns. increased and triiodothyronine decreased as the crude protein level increased from 150 to 200 g/kg diet. Supplemental **lysine** did not affect plasma levels of these hormones. Although dietary crude protein levels noticeably changed rates of in vitro lipogenesis, changing either the level of a single limiting amino acid or the levels of several limiting amino acids did not change lipogenesis.

IT **56-87-1**, **Lysine**, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(feeding expt. with, on chickens)

RN 56-87-1 HCAPLUS

CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

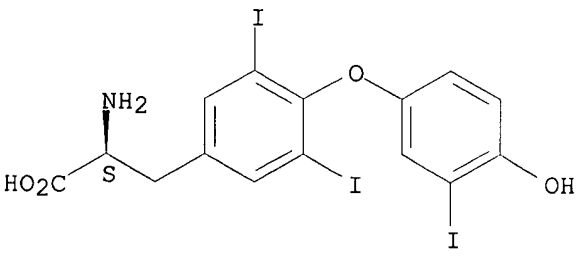


IT **6893-02-3**, Triiodothyronine
RL: BIOL (Biological study)
(of plasma of chickens, dietary crude protein effect on)

RN 6893-02-3 HCAPLUS

CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



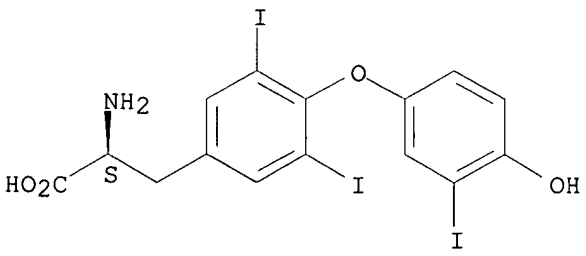
Searcher : Shears 308-4994

L42 ANSWER 30 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:513824 HCAPLUS
DOCUMENT NUMBER: 119:113824
TITLE: Studies on the induction and phosphorylation of xanthine dehydrogenase in cultured chick embryo hepatocytes
AUTHOR(S): Schieber, Andrea; Edmondson, Dale E.
CORPORATE SOURCE: Sch. Med., Emory Univ., Atlanta, GA, 30322, USA
SOURCE: European Journal of Biochemistry (1993), 215(2), 307-14
CODEN: EJBCAI; ISSN: 0014-2956
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Chick embryo hepatocytes, cultured in a chem. defined medium, were used to investigate hormonal requirements for xanthine dehydrogenase induction and to det. whether the enzyme is phosphorylated. T3 is required to induce the synthesis of active enzyme. Inclusion of sodium tungstate in the medium resulted in the complete loss of enzyme activity but no decrease of immunochem. detectable levels of enzyme. Immunopptd. xanthine dehydrogenase from cell exts. migrates with enzyme purified from adult chicken liver on SDS/PAGE. Both the native 150-kDa subunit and the 130-kDa form of the enzyme is obsd. N-terminal sequence anal. of the 150-kDa subunit shows the following: Ala-Pro-Pro-Glu-Thr-Gly-Asp-Glu-Leu-Val-**Phe-Phe**-Val-Asn-Gly-**Lys-Lys** -Val-Val which is similar to the published N-terminal sequences of rat, mouse, and insect xanthine dehydrogenases. Autoradiog. of denaturing gels of xanthine dehydrogenase isolated from 32Pi-labeled hepatocytes demonstrates that the 150-kDa and the 130-kDa forms of the enzyme are phosphorylated. Chem. phosphate anal. of acid-pptd., electrophoretically pure chicken liver xanthine dehydrogenase also shows the presence of covalently bound phosphate. Phosphoamino acid anal. of both 32P-labeled forms of the enzyme demonstrates the presence of phosphoserine. Thus, chicken liver xanthine dehydrogenase contains a phosphoserine residue as found previously in bovine milk xanthine oxidase.

IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BIOL (Biological study)
(xanthine dehydrogenase induction by, in hepatocyte of chicken embryo in culture)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



Searcher : Shears 308-4994

RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

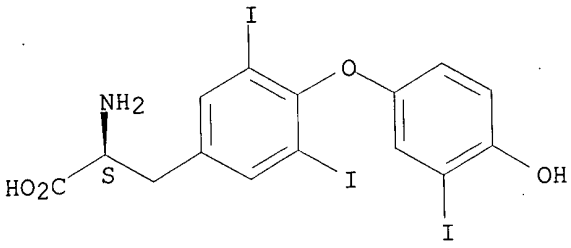
L42 ANSWER 31 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:420427 HCAPLUS
DOCUMENT NUMBER: 119:20427
TITLE: The effects of D-fenfluramine on the development of aflatoxin-**B1** induced GGT+ hepatic foci in F344 rats
AUTHOR(S): Bell, Rhonda C.; Levitsky, David A.; Campbell, T. Colin
CORPORATE SOURCE: Div. Nutr. Sci., Cornell Univ., Ithaca, NY, 14853, USA
SOURCE: International Journal of Obesity (1993), 17(4), 215-21
CODEN: IJOBDP; ISSN: 0307-0565
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The role of total caloric intake and attained body wt. in the carcinogenic process in rodents is controversial. In the present study, the authors examd. the development of hepatic pre-neoplastic foci in rats treated with aflatoxin-**B1** (AFB) and given the drug D-fenfluramine (FEN). Ingestion of this drug leads to a redn. in body wt. by increasing the thermogenic response to a meal and by transiently reducing food intake. Young male rats were dosed with AFB or vehicle alone and were then assigned to receive control diet (NO FEN) or control diet + FEN (FEN; 0.15 g/kg diet) for 12-14 wk. Body wt. gain and food intake were reduced among animals given FEN; brown adipose tissue wt. (% body wt.) was elevated in these groups. Indexes of protein status, and concns. of T3, T4 and **insulin** did not differ among the groups. All animals given FEN developed GGT+ hepatic foci. The no. and vol. fraction of foci were significantly larger in FEN relative to NO FEN animals. The mean diam. of foci was slightly enhanced among FEN animals. These results suggest that FEN promotes the development of AFB-induced hepatocellular foci, despite reduced food intake and lower body wt. Since FEN is widely used as a wt. loss aid, these findings deserve further study.

IT **6893-02-3P**, Triiodothyronine **9004-10-8P**, **Insulin**, biological studies
RL: PREP (Preparation)
(fenfluramine effect on, of blood plasma, carcinogenesis from aflatoxin-**B1** enhancement in relation to)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

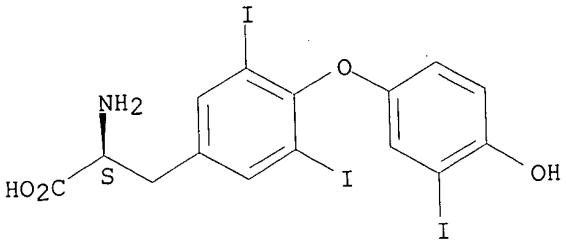


RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 32 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:252182 HCAPLUS
DOCUMENT NUMBER: 118:252182
TITLE: Serum-free culture of human hepatoma Hep G2 cells with egg yolk low density lipoprotein
AUTHOR(S): Nakama, Akihiko; Yamada, Akio
CORPORATE SOURCE: Osaka City Inst. Public Health Environ. Sci., Osaka, 543, Japan
SOURCE: Bioscience, Biotechnology, and Biochemistry (1993), 57(3), 410-13
CODEN: BBBIEJ; ISSN: 0916-8451
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors prepd. serum-free medium supplemented with growth factors, hormones, nutrients, and egg yolk low-d. lipoprotein (LDL), and examd. the growth-promoting activities of growth factors and culture conditions on human hepatoma Hep G2 cells. Collagen type I was appropriate for precoating tissue culture vessels in which Hep G2 cells were cultured in serum-free medium. William's medium E and a mixt. of Dulbecco and Vogt's modification of Eagle's medium and Ham's F-12 (1:1) were used as basal medium. LDL was the most effective growth promoter of Hep G2 cells among the supplemented factors. High-d. lipoprotein (HDL) prepd. from human serum showed 10-fold more growth promoting activity than LDL, but HDL is more expensive. Therefore, the serum-free medium supplemented with growth factors, hormones, nutrients, and egg yolk LDL was suitable for Hep G2 cell culture.
IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BIOL (Biological study)
(in culture medium, for Hep G2 cells of human)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 33 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:205098 HCAPLUS
DOCUMENT NUMBER: 118:205098
TITLE: Bromocriptine redirects metabolism and prevents seasonal onset of obese hyperinsulinemic state in Syrian hamsters
AUTHOR(S): Cincotta, Anthony H.; MacEachern, Tracy A.; Meier, Albert H.
CORPORATE SOURCE: Wellman Lab. Photomed., Massachusetts Gen. Hosp., Boston, MA, 02114, USA
SOURCE: American Journal of Physiology (1993), 264(2, Pt. 1), E285-E293
CODEN: AJPHAP; ISSN: 0002-9513
DOCUMENT TYPE: Journal
LANGUAGE: English

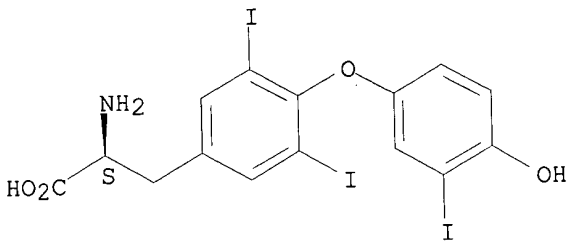
AB Bromocriptine redirects metab. and prevents seasonal onset of the obese hyperinsulinemic state in Syrian hamsters. Metabolic and hormonal effects of bromocriptine were studied in seasonally obese female Syrian hamsters, Mesocricetus auratus. Daily injections of bromocriptine and vehicle (controls) were made at light onset (10:14-h light-dark cycle) for 10 wk. After 9 wk of treatment, blood samples were taken every 4 h during a day for assays of hormones, glucose, triglyceride, and fatty acids, and after 10 wk of treatment, tests were carried out to measure **insulin** -stimulated glucose disposal during a hyperinsulinemic clamp, lipid mobilization (rate of glycerol appearance), protein turnover (**lysine** flux and deamination), and body compn. (deuterium diln.). Bromocriptine reduced percent body fat by 53% and increased percent lean body mass by 8%. It also decreased triglyceride levels by 52% and plasma free fatty acid concn. during the dark-near light onset by 49% and glycerol appearance by 25%. Protein synthesis and catabolism were increased by 62 and 56%, resp., and deamination of amino acid was decreased by 53% by bromocriptine. Bromocriptine reduced plasma concn. of **insulin** throughout the day, esp. at light onset, by 78% without change in baseline glucose level and markedly decreased steady-state plasma glucose (by 40%) during a continuous infusion of **insulin** and glucose. It also reduced the nocturnal plasma concn. of prolactin by 90%, cortisol by 70%, and thyroid hormones (thyroxine and triiodothyronine) by 50% and dramatically altered the circadian profiles of these hormones and **insulin**. Bromocriptine apparently shifts metab. from

that found in obese, hyperinsulinemic hamsters during winter to conditions resembling those of lean euinsulinemic hamsters during other seasons. The marked metabolic changes may result from changes in the phase relations of circadian neuroendocrine oscillations that are believed to regulate seasonal metabolic conditions.

IT **6893-02-3**, Triiodothyronine
RL: BIOL (Biological study)
(secretion of, in seasonal hyperinsulinemic obesity, bromocriptine effect on)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT **9004-10-8**, **Insulin**, biological studies
RL: BIOL (Biological study)
(secretion of, in seasonal obesity, bromocriptine effect on)

RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 34 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	1991:631050 HCAPLUS
DOCUMENT NUMBER:	115:231050
TITLE:	The effect of **lysine** implantation on the hormones, metabolism, and growth of young cattle
AUTHOR(S):	Shamberev, Yu. N.; Ivanov, I. S.; Gavrishchuk, V. I.; Netesa, Yu. I.; Silaeva, A. M.; Gusov, S. A.
CORPORATE SOURCE:	Lab. Endokrinol., S-kh. Akad. im. Timiryazeva, Moscow, USSR
SOURCE:	Izvestiya Timiryazevskoi Sel'skokhozyaistvennoi Akademii (1991), (4), 110-19 CODEN: ITSAA7; ISSN: 0021-342X
DOCUMENT TYPE:	Journal
LANGUAGE:	Russian

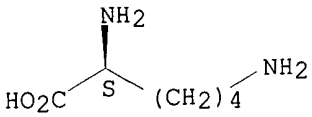
AB The effect of **lysine** implantation (180 mg) on the metab. and growth of calves during the milk feeding period was studied. The prepn. increased daily gains and the amt. of free **insulin** in blood, decreased the levels of blood tyroxine, calcium, inorg. phosphorus, and magnesium and intensified the anabolic processes.

IT **56-87-1**, L-**Lysine**, biological studies
RL: BIOL (Biological study)

(feeding expt. with implantation of, on young cattle, hormonal status and metab. and growth in relation to)

RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

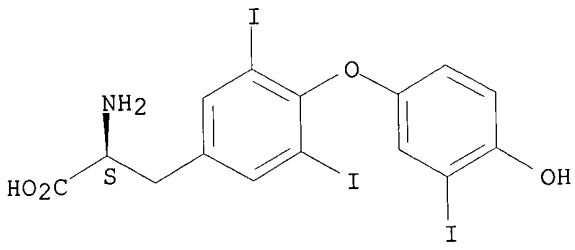
Absolute stereochemistry.



IT **6893-02-3 9004-10-8, Insulin,** biological studies
RL: BIOL (Biological study)
(of blood, of young cattle, feeding expt. with **lysine** implantation effect on)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 35 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:115385 HCAPLUS
DOCUMENT NUMBER: 112:115385
TITLE: Serum-free cell culture medium for human liver epithelial cell line
INVENTOR(S): Cole, Katharine H.; Lechner, John F.; Harris, Curtis C.
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA
SOURCE: U. S. Pat. Appl., 36 pp. Avail. NTIS Order No. PAT-APPL-7-284 331.
CODEN: XAXXAV
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 284331	A0	19890615	US 1988-284331	19881214
WO 9007007	A1	19900628	WO 1989-US5581	19891213
W: AU, JP				
RW: AT, BE, CH, DE, ES, FR, GB, IT, LU, NL, SE				
AU 9048159	A1	19900710	AU 1990-48159	19891213
AU 621972	B2	19920326		
JP 03504330	T2	19910926	JP 1990-501577	19891213
EP 449950	A1	19911009	EP 1990-901348	19891213
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
CA 2005494	AA	19900614	CA 1989-2005494	19891214
IL 92703	A1	19941021	IL 1989-92703	19891214
US 5342777	A	19940830	US 1992-844873	19920303
US 5529920	A	19960625	US 1992-879165	19920501
US 5665589	A	19970909	US 1993-25336	19930303
WO 9420607	A1	19940915	WO 1994-US1910	19940303
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9463516	A1	19940926	AU 1994-63516	19940303
EP 687294	A1	19951220	EP 1994-910730	19940303
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5759765	A	19980602	US 1995-458878	19950602

PRIORITY APPLN. INFO.:

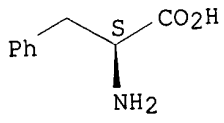
US 1988-284331	A	19881214
US 1988-284368	B1	19881214
US 1989-377967	B1	19890711
WO 1989-US5581	A	19891213
US 1992-844873	A2	19920303
US 1992-879165	A2	19920501
US 1993-25336	A	19930303
WO 1994-US1910	W	19940303

AB A serum-free cell culture medium for human liver epithelial cells contains Ca2+, glucose, **insulin**, hydrocortisone, epidermal growth factor, transferrin, cholera toxin, triiodothyronine, and growth promoting amts. of mammalian hormones and mitogenic factors, including lipoproteins, cholesterol, phospholipids, and fatty acids. Normal human hepatocytes were cultured .apprx.15 wk. The HLC cell line was developed from SV-40 DNA (plasmid pRSV-T)-transfected normal human hepatocytes and cultured.

IT **63-91-2**, L-**Phenylalanine**, biological studies
6893-02-3 9004-10-8, **Insulin**, biological studies
RL: ANST (Analytical study)
(culture medium for human liver epithelium cells contg.)

RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

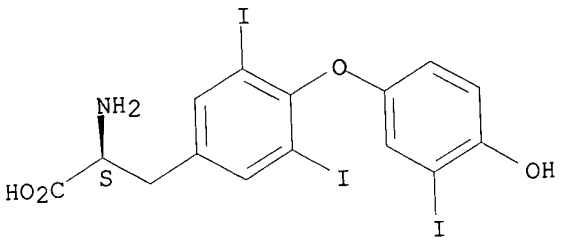
Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX

NAME)

Absolute stereochemistry. Rotation (+).

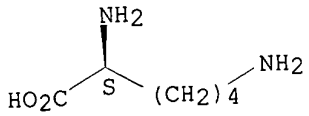


RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

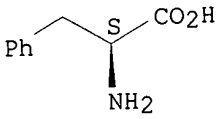
L42 ANSWER 36 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:5212 HCAPLUS
DOCUMENT NUMBER: 112:5212
TITLE: A comparison of fetal and newborn bovine serum components
AUTHOR(S): Peek, M. J.; Markham, R.; Fraser, I. S.
CORPORATE SOURCE: Dep. Obstet. Gynaecol., Univ. Sydney, 2006, Australia
SOURCE: Australian Journal of Medical Laboratory Science (1989), 10(2), 40-1
CODEN: AJMLDP; ISSN: 0158-4960
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Although bovine serum has been used for many years to supplement cell culture media, the concns. of its components are not widely known. The concns. of common electrolytes, amino acids, some growth factors, and hormones in fetal and newborn bovine serum are tabulated.
IT **56-87-1**, **Lysine**, biological studies
63-91-2, **Phenylalanine**, biological studies
6893-02-3, Triiodothyronine
RL: BIOL (Biological study)
(of blood serum, of bovine fetus and newborn)
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



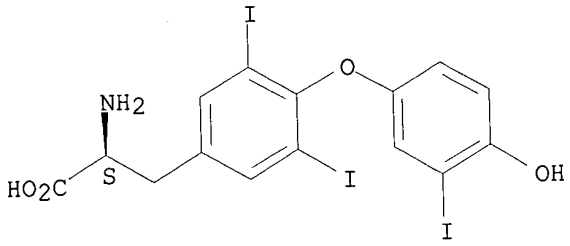
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



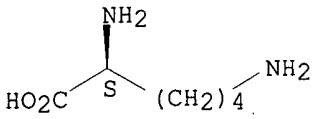
L42 ANSWER 37 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:509002 HCAPLUS
DOCUMENT NUMBER: 111:109002
TITLE: Effects of cimaterol, a .beta.-adrenergic agonist, on protein metabolism in rats
AUTHOR(S): Eadara, Jyothi K.; Dalrymple, Ronald H.; DeLay, Roger L.; Ricks, Catherine A.; Romsos, Dale R.
CORPORATE SOURCE: Dep. Food Sci. Hum. Nutr., Michigan State Univ., East Lansing, MI, 48824-1224, USA
SOURCE: Metabolism, Clinical and Experimental (1989), 38(9), 883-90
CODEN: METAAJ; ISSN: 0026-0495
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fractional accretion rates of total body 3-methylhistidine-contg. proteins (actin and myosin) were elevated 40-120% in rats fed a high-carbohydrate diet contg. 10 or 100 ppm cimaterol for 1 wk. Fractional degrdn. and fractional synthesis rates of these proteins were examd. by measuring the total body 3-methylhistidine content and urinary excretion of 3-methylhistidine. Consumption of the diet contg. 100 ppm cimaterol for 1 wk caused a 25% redn. in fractional degrdn. rates and a concomitant 32% increase in fractional synthesis rates of 3-methylhistidine-contg. proteins. The effects of cimaterol on fractional accretion, degrdn., and synthesis rates of 3-methylhistidine-contg. proteins diminished after 1 wk. Cimaterol failed to influence plasma **insulin**, triiodothyronine, or corticosterone concns. The dramatic increase in accretion of 3-methylhistidine-contg. proteins obsd. during the 1st wk rats are fed diets contg. cimaterol is caused by reciprocal action on protein degrdn. and synthesis.

IT **56-87-1**, L-**Lysine**, biological studies
6893-02-3, Triiodothyronine
RL: BIOL (Biological study)

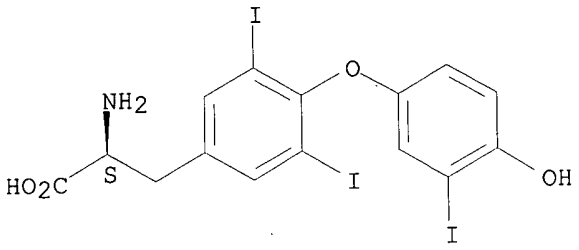
(of blood plasma, cimaterol effect on)
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



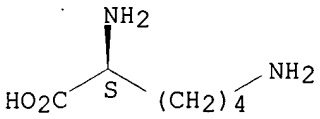
L42 ANSWER 38 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:93888 HCAPLUS
DOCUMENT NUMBER: 110:93888
TITLE: Endocrine gland activity and metabolism in young bulls during use of growth stimulants.
AUTHOR(S): Shamberev, Yu. N.; Ivanov, I. S.; Zatirakhin, V. N.; Netesa, Yu. I.
CORPORATE SOURCE: Mosk. S-kh. Akad., Moscow, USSR
SOURCE: Izvestiya Timiryazevskoi Sel'skokhozyaistvennoi Akademii (1988), (6), 148-53
CODEN: ITSAA7; ISSN: 0021-342X
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Feeding young bulls the antithyroid prepn. Mg(ClO4)2 or treatment with implants of 180 mg **lysine** plus 60 mg gibberellins for 95 days increased wt. gains by 11.1 and 11-16%, resp. There was no additive effect when the treatments were combined. Both treatments tended to decrease free **insulin** levels in the blood; Mg(ClO4)2 increased circulating triiodothyronine levels. Blood thyroxine levels were not affected. Blood protein and urea levels remained unchanged, whereas creatinine levels were decreased and residual N and Ig were increased. Blood amine N levels were also increased in the animals receiving **lysine**-gibberellin implants. The growth stimulant implants also tended to increase blood sugar and lipids but decreased blood free fatty acids.

IT **56-87-1, Lysine,** biological studies
RL: BIOL (Biological study)
(metab. and pancreatic islet and thyroid gland function response

to gibberellin and, in cattle)
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

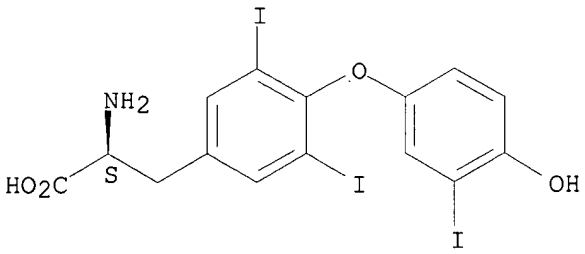
Absolute stereochemistry.



IT **9004-10-8, Insulin**, biological studies
RL: BIOL (Biological study)
(of blood, of cattle, gibberellin-**lysine** implants and magnesium perchlorate feeding decrease of)
RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **6893-02-3**, Triiodothyronine
RL: BIOL (Biological study)
(of blood, of cattle, gibberellin-**lysine** implants and magnesium perchlorate feeding effect on)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



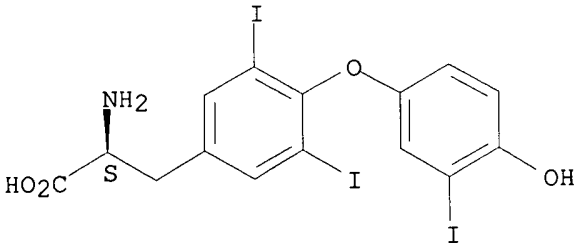
L42 ANSWER 39 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:509268 HCAPLUS
DOCUMENT NUMBER: 109:109268
TITLE: Interrelationships between energy intake and endogenous porcine growth hormone administration on the performance, body composition and protein and energy metabolism of growing pigs weighing 25 to 55 kilograms live weight
AUTHOR(S): Campbell, R. G.; Steele, N. C.; Caperna, T. J.; McMurtry, J. P.; Solomon, M. B.; Mitchell, A. D.
CORPORATE SOURCE: U. S. Dep. Agric., Beltsville, MD, 20705, USA
SOURCE: Journal of Animal Science (Savoy, IL, United States) (1988), 66(7), 1643-55
CODEN: JANSAG; ISSN: 0021-8812
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Barrows were used in a 2 .times. 3 factorial expt. to investigate the effects of porcine growth hormone (pGH) administration (USDA-pGH-**B1**; 0 and 100 .mu.g/kg body wt./d) and 3 levels of feeding of a single diet (ad libitum and 1.64 and 1.38 kg/d) on the performance, body compn., and rates of protein and fat deposition of pigs growing over the live wt. phase 25-55 kg. Raising energy intake (EI) resulted in linear increases in growth rate and in protein and fat accretion but had no effect on the feed-to-gain ratio (F/G). Carcass fat content and carcass fat measurements also increased with EI, whereas carcass protein and water decreased. Growth hormone administration resulted in improvements in growth rate (16 to 26%e, F/G, protein deposition (34 to 50%) and increases in carcass protein and water at each level of feeding, but reduced ad libitum feed intake, carcass fat content, and carcass fat measurements. Estd. maintenance energy expenditure was increased by pGH administration (2.02 vs 1.72 Mcal digestible energy/d). The effects of pGH on growth performance and energy and protein metab. were largely independent of, and additive to, the effects of EI.

IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BIOL (Biological study)
(of blood serum, of pigs, feed energy level and growth hormone administration effect on)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 40 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	1988:74219 HCAPLUS
DOCUMENT NUMBER:	108:74219
TITLE:	The effect of gibberellin and **lysine** implantation on growth, endocrine system and metabolism in young bulls
AUTHOR(S):	Shamberev, Yu. N.; Ivanov, I. S.; Gavrishchuk, V. I.; Netesa, Yu. I.; Fojana, N. V.
CORPORATE SOURCE:	USSR
SOURCE:	Izvestiya Timiryazevskoi Sel'skokhozyaistvennoi Akademii (1987), (6), 172-8 CODEN: ITSAA7; ISSN: 0021-342X

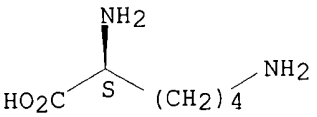
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Simple implantation of gibberellin (72 mg) alone or in combination with **lysine** (250 mg) in steers (initial av. wt. 336 k) increased av. wt. gains in a 59-day expt. by 9-10 and 23.3%, resp. In another expt., single implantation of gibberellin (60 mg) in combination with **lysine** (250 mg) (granulated with a sucrose and stearic acid filler and wax cover) increased av. daily wt. gains of steers (initial wt. 290 kg) by 11-15.4%. Combined gibberellin and **lysine** implantation also increased the level of blood serum **insulin** and thyroid hormones. The implants activated anabolic processes and decreased protein decompn. and increased protein biosynthesis and blood sugar level.

IT **56-87-1, Lysine,** biological studies
RL: BIOL (Biological study)
(implantation of, with gibberellins, steer growth and endocrine system response to)

RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

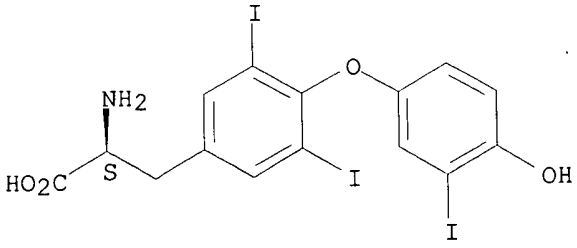
Absolute stereochemistry.



IT **6893-02-3,** Triiodothyronine **9004-10-8, Insulin,** biological studies
RL: BIOL (Biological study)
(of blood, of steers, gibberellin and **lysine** implantation effect on)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodopnenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 41 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:625057 HCAPLUS
DOCUMENT NUMBER: 105:225057

TITLE: The effects of protein and calorie malnutrition on growth, **insulin**-like growth factors and other growth-promoting hormones in the rat

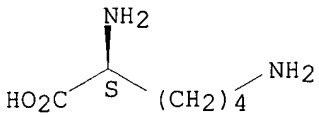
AUTHOR(S): Schalch, D. S.; Cree, T. C.
CORPORATE SOURCE: Clin. Sci. Cent., Univ. Wisconsin, Madison, WI, 53792, USA

SOURCE: International Congress Series (1986), 700(Diabetes 1985), 293-8
CODEN: EXMDA4; ISSN: 0531-5131
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Male Sprague-Dawley rats (45-50 g) were fed diets contg. **lysine** [**56-87-1**]-deficient protein (wheat gluten) and a diet restricting dietary energy intake, and changes in growth and blood serum growth hormone [9002-72-6], somatomedins (total **insulin**-like growth factor (IGF) [61912-98-9] and IGF-I [67763-96-6]), **insulin**, T4 [51-48-9], T3 [**6893-02-3**] and corticosterone [50-22-6] were followed. Wheat gluten-fed rats showed growth retardation (56 and 59% wt. of controls). Serum growth hormone was significantly reduced (68 vs. 106 ng/mL) in rats on the **lysine**-deficient diet. No significant differences in mean serum total IGF and IGF-I were found between wt.-matched exptl. and control animals. However, both of these indexes correlated with the body wt. (rather than with age). The mean serum T4 and T3 levels were significantly higher (6.8 vs. 4.9 .mu.g/dL and 239 vs. 158 ng/dL, resp.) in **lysine**-deficient rats. In contrast, in the caloric-restricted rats, serum T4 and T3 were significantly lower than in controls. No significant differences were found in serum **insulin**. Corticosterone was higher in the **lysine**-deficient than control group, while it was identical for the calorie-restricted and control rats.

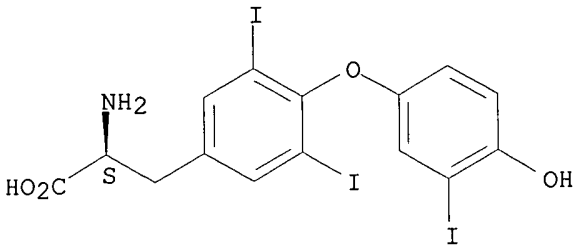
IT **56-87-1**, biological studies
RL: BIOL (Biological study)
(deficiency of, growth and blood serum hormones in)
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **6893-02-3**
RL: BIOL (Biological study)
(of blood serum, protein and **lysine** deficiency and energy restriction effect on, growth in relation to)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



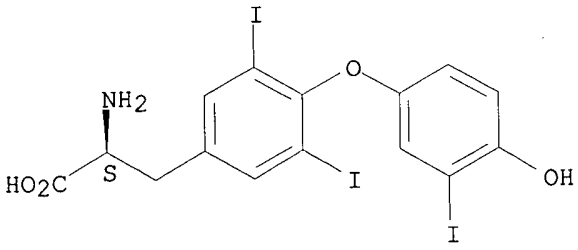
L42 ANSWER 42 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:213099 HCAPLUS
DOCUMENT NUMBER: 104:213099
TITLE: Solubility of pharmaceuticals. I
AUTHOR(S): Tsunakawa, Nobutaka; Tamura, Bunzo
CORPORATE SOURCE: Pharm. Manuf. Assoc. Tokyo, Tokyo, 103, Japan
SOURCE: Iyakuhin Kenkyu (1986), 17(1), 124-30
CODEN: IYKEDH; ISSN: 0287-0894
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The solubilities of 241 pharmaceuticals were studied using >47 solvents, and the extent of dissoln. was described.

IT **55-06-1 63-91-2**, properties **9004-10-8**, properties
RL: PRP (Properties)
(soly. of)

RN 55-06-1 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo-, monosodium salt (9CI) (CA INDEX NAME)

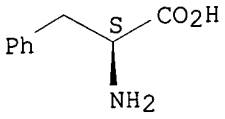
Absolute stereochemistry. Rotation (+).



● Na

RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

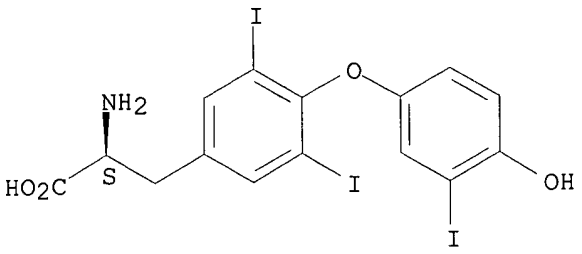
L42 ANSWER 43 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:146554 HCAPLUS
DOCUMENT NUMBER: 104:146554
TITLE: Increased **phenylalanine** incorporation in regenerating skeletal muscle grafts
AUTHOR(S): Schwartz, Jessica; Wiesen, Jane; Carlson, Bruce; Yamasaki, L.; Moore, M.; Womble, Mark
CORPORATE SOURCE: Med. Sch., Univ. Michigan, Ann Arbor, MI, 48109, USA
SOURCE: Canadian Journal of Physiology and Pharmacology (1986), 64(2), 199-205
CODEN: CJPPA3; ISSN: 0008-4212
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Skeletal muscle regenerates following grafting, but little is known about protein synthesis and its regulation during regeneration. The sequence of changes in protein synthesis in rat extensor digitorum longus (EDL) muscle was detd. by the measurement of **phenylalanine** (**Phe**) incorporation into muscle protein at various times after grafting. Compared with control EDL, **Phe** incorporation in grafts doubled in 1 day, was 4-8-fold greater from days 2-10 after grafting, and then subsided. Tissue mass (wet wt.) increased rapidly from days 7-20 in EDL grafts. The maximal increase in protein synthesis occurred 7-10 days after grafting, whether or not the nerve was left intact. Autoradiog. indicated that incorporated radioactivity was assocd. with regenerating muscle fibers on day 10. Deficiencies of **insulin**, pituitary or testicular hormones, or chronic in vivo administration of **insulin**, growth hormone, testosterone, or tri-iodothyronine did not substantially alter the elevation in incorporation of the **Phe** into muscle protein 10 days after grafting. The breakdown of EDL protein, measured in vitro simultaneously with protein synthesis, was increased 5-fold, and overall protein degrdn. was elevated 6-fold 10 days after grafting. These findings indicate that **Phe** incorporation is rapidly elevated following grafting of the EDL, and that by days 7-10 reflects synthesis in regenerating muscle fibers. The increase in protein synthesis assocd. with muscle regeneration at this time appears to be independent of innervation and anabolic hormones.

IT **6893-02-3 9004-10-8**, biological studies
RL: BIOL (Biological study)
(protein formation by regenerating muscle autograft response to)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

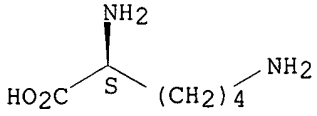
L42 ANSWER 44 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:105531 HCAPLUS
DOCUMENT NUMBER: 104:105531
TITLE: Culture medium for animal cells containing growth factors and nutrition substances as an alternative to bovine fetal serum
AUTHOR(S): Tozzini, F.; Bandecchi, P.
CORPORATE SOURCE: Pisa-Fac. Med. Vet., Univ. Studi, Pisa, Italy
SOURCE: Archivio Veterinario Italiano (1985), 36(5-6), 151-8
CODEN: AVEIAN; ISSN: 0004-0479
DOCUMENT TYPE: Journal
LANGUAGE: Italian

AB Fetal bovine serum was replaced by growth factors and other nutrients in a culture medium for animal cells. In growth assays, no differences in no. of cells were obsd. after 6 days culture when RK13, VERO and IMR-31 cells were grown as stationary cultures with the 2 media used. In tests based on permissivity to vesicular stomatitis virus, no significant differences in virus titer were obsd. in cultures obtained with the 2 media. The value of the medium (MES-N) was confirmed by BHK21 cell growth on roller flasks. An increase of 28-fold the initial no. of cells was reached after 90 h of culture without medium renewing.

IT **56-87-1**, biological studies **63-91-2**, biological studies **6893-02-3 9004-10-8**, biological studies
RL: ANST (Analytical study)
(culture medium contg., for animal cells)

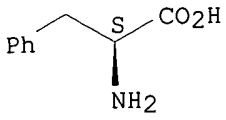
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



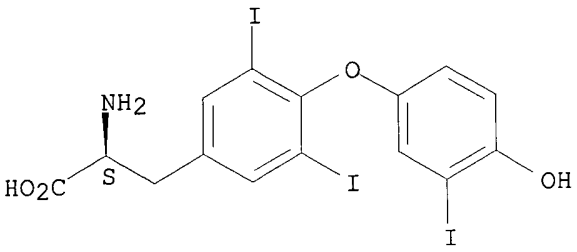
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

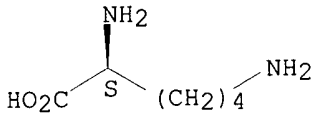
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 45 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:503849 HCAPLUS
DOCUMENT NUMBER: 103:103849
TITLE: Protein utilization in growth: effect of **lysine** deficiency on serum growth hormone, somatomedins, **insulin**, total thyroxine (T4) and triiodothyronine, free T4 index, and total corticosterone
AUTHOR(S): Cree, T. C.; Schalch, D. S.
CORPORATE SOURCE: Cent. Health Sci., Univ. Wisconsin, Madison, WI, 53792, USA
SOURCE: Endocrinology (1985), 117(2), 667-73
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of a **lysine** [**56-87-1**]-deficient diet on the growth of young rats and on serum levels of growth hormone (GH) [9002-72-6], somatomedins [**insulin**-like growth factors (IGFs) I [67763-96-6] and II [67763-97-7]], **insulin** [**9004-10-8**], total T4 [51-48-9] and T3 [**6893-02-3**], free T4 index, and total corticosterone [50-22-6] were detd. Rats eating a wheat gluten diet consumed .apprx.33% as much **lysine** as controls eating an isocaloric and isonitrogenous casein diet and grew at .apprx.56% of the control rate. The mean GH level in the exptl. group (68 ng/mL) was lower than that in the controls (106 ng/mL), but was not correlated with age or body wt. and was only weakly correlated with total IGF. In

contrast, total IGF and IGF-I were correlated with age and body wt. The levels of these somatomedins in the wheat gluten-fed animals were consistently lower than those in their age-matched controls, but not different from those in their wt.-matched controls, throughout the study. Serum total T4 and T3 (but not the free T4 index) and corticosterone were elevated in the exptl. rats, perhaps representing a serum binding globulin adaptation to **lysine** deficiency that is not clearly understood. Thus, the ability of growing rats to use dietary protein anabolically was altered to examine the nutritional effects of qual. protein deficiency on growth and the growth-promoting endocrine system.

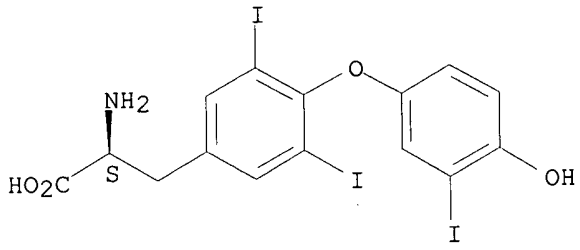
IT **56-87-1**, biological studies
RL: BIOL (Biological study)
(growth suppression by deficiency of, hormones of blood serum in)
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **6893-02-3 9004-10-8**, biological studies
RL: BIOL (Biological study)
(of blood serum, in growth limitation by **lysine** deficiency)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 46 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:403559 HCAPLUS
DOCUMENT NUMBER: 101:3559
TITLE: Supplements and their combination for cell culture mediums
INVENTOR(S): Kelley, P. R.; Gaudreau, C. J.; Friedman, O. M.
PATENT ASSIGNEE(S): Collaborative Research, Inc., USA

SOURCE: Belg., 34 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 897760	A1	19840102	BE 1983-10866	19830915
CH 666048	A	19880630	CH 1983-4970	19830913
DK 8304174	A	19840316	DK 1983-4174	19830914
DE 3333190	C2	19921112	DE 1983-3333190	19830914
JP 07028728	B4	19950405	JP 1983-168520	19830914

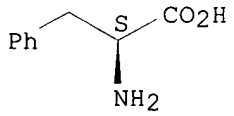
PRIORITY APPLN. INFO.: US 1982-418522 19820915

AB A supplement is described for promoting the growth of various cells (transformed or nontransformed) in a variety of culture media contg. a minor portion (5-25%) of mammalian serum (preferably newborn calf serum) and a major portion of substitutes of components of animal serum, e.g., aq. solns. of thyroid and peptide hormones, corticoids, androgens, estrogens, growth factors, transport factors, nutritive agents, mineral salts, amino acids, vitamins, sugar, and small amts. of other components. Thus, newborn calf serum (37.degree.) is mixed with a portion of an aq. soln. contg. the mineral salts, amino acids, vitamins, etc., followed by addn. of the remaining serum and supplement and sterilization by double filtration. The medium was used for the culture of BHK-1 cells and gives faster growth rates than conventional media. It was also used for culturing various other cells such as adenocarcinoma, fibroblasts, hybridoma, and glioma cells.

IT **63-91-2**, biological studies **6893-02-3**
9004-10-8, biological studies
RL: ANST (Analytical study)
(supplement contg., for mammalian cell culture)

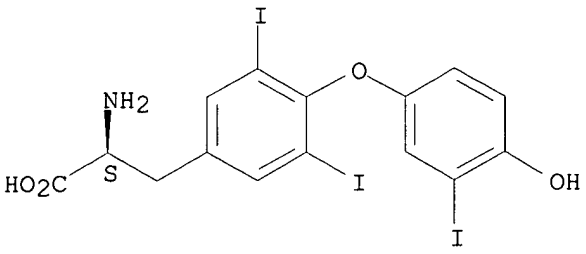
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

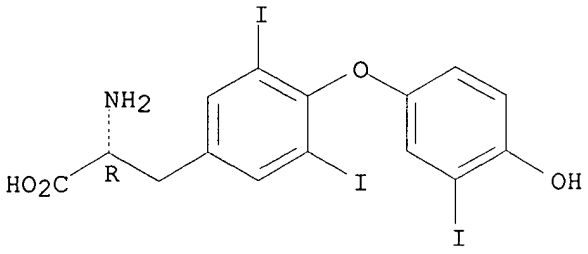
L42 ANSWER 47 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:97168 HCAPLUS
DOCUMENT NUMBER: 100:97168
TITLE: Direct anabolic effects of thyroid hormone on isolated mouse heart
AUTHOR(S): Crie, J. Stanley; Wakeland, Jacquline R.; Mayhew, Bobbie A.; Wildenthal, Kern
CORPORATE SOURCE: Health Sci. Cent., Univ. Texas, Dallas, TX, 75235, USA
SOURCE: American Journal of Physiology (1983), 245(5, Pt. 1), C328-C333
CODEN: AJPHAP; ISSN: 0002-9513
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The direct effects of L- [**6893-02-3**] and D-triiodothyronine [**5714-08-9**], on cardiac protein metab. were investigated using fetal mouse hearts in organ culture. This model allowed the prodn. of thyrotoxicosis in isolated hearts in vitro in the absence of the usual systemic metabolic and hemodynamic effects of thyroid hormones. Hearts were studied during the first 24 h of T3 exposure in culture, before changes in beating rate due to T3 occurred. **Phenylalanine** release was decreased by 26% by the optimal concns. of T3 (10-7-10-6M). Changes were similar in the presence or absence of insulin. D-T3 was also anabolic, decreasing **phenylalanine** release by 24% at concns. of 10-6-10-5M. The L-isomer increased protein synthesis by 23% and decreased protein degrdn., as measured by **phenylalanine** release in the presence of cycloheximide, by 5%. The D-isomer also increased protein synthesis but had no measurable effect on protein degrdn. Apparently, thyroid hormones can exert direct anabolic effects on heart in the absence of systemic hemodynamic and metabolic changes. These effects are mediated primarily through an acceleration of the rate of protein synthesis; in the case of L-T3, a small inhibition of proteolysis may also occur.

IT **5714-08-9 6893-02-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(protein metab. by heart response to)
RN 5714-08-9 HCAPLUS
CN D-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX

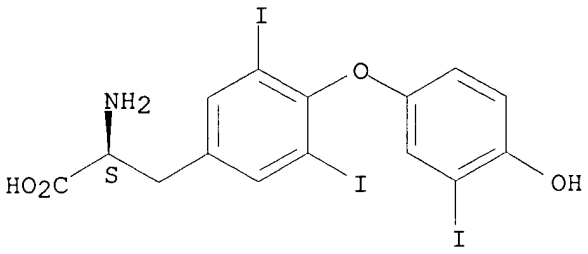
NAME)

Absolute stereochemistry.



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



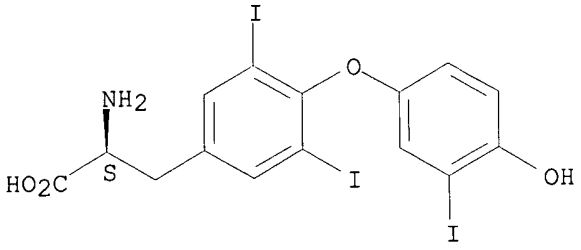
L42 ANSWER 48 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:606736 HCAPLUS
DOCUMENT NUMBER: 99:206736
TITLE: Whole body protein breakdown rates and hormonal adaptation in fasted obese subjects
AUTHOR(S): Henson, Lindsey C.; Heber, David
CORPORATE SOURCE: Gen. Clin. Res. Cent., Harbor-UCLA Med. Cent., Torrance, CA, 90509, USA
SOURCE: Journal of Clinical Endocrinology and Metabolism (1983), 57(2), 316-19
CODEN: JCEMAZ; ISSN: 0021-972X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Changes in whole body protein breakdown rates and in the circulating levels of a no. of hormones involved in protein anabolism and catabolism were systematically studied in obese subjects after 12 h and after 7 days of fasting. Whole body protein breakdown rates, measured with a primed continuous infusion of L-[14C]**lysine**, were decreased after 7 days of fasting (1.54 g/kg/day) compared to those after 12 h of fasting (1.96 g/kg/day). Plasma **insulin** [**9004-10-8**] decreased and glucagon [9007-92-5] increased after 7 days of fasting, resulting in an increased glucagon-to-**insulin** molar ratio. Plasma cortisol [50-23-7], urinary free cortisol excretion, plasma rT3 [5817-39-0] levels, and branched-chain amino acid levels increased after 7 days of fasting.

Serum **lysine** levels, used for the calcns. of whole body protein breakdown rates, were not changed. Thus, decreased whole body protein breakdown contributes to the decreased N excretion obsd. with fasting in obese subjects, and a decrease in circulating levels of free T3 may lead to this adaptive decrease in protein breakdown in fasted obese subjects, since the other hormones measured either did not change or changed in catabolic direction.

IT **6893-02-3 9004-10-8**, biological studies
RL: BIOL (Biological study)
(of blood plasma, in starvation in human in obesity)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 49 OF 54 HCAPLUS COPYRIGHT 2003 ACS

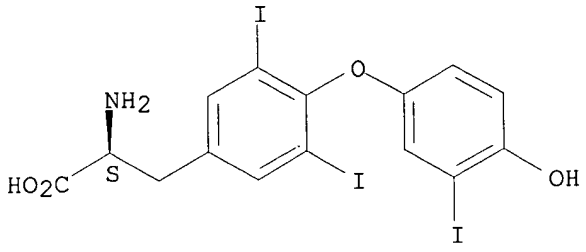
ACCESSION NUMBER:	1980:405220 HCAPLUS
DOCUMENT NUMBER:	93:5220
TITLE:	Panhypopituitarism secondary to head trauma: evidence for a hypothalamic origin of the deficit
AUTHOR(S):	Jambart, Selim; Turpin, Gerard; De Gennes, Jean Luc
CORPORATE SOURCE:	Serv. Endocrinol.-Metab., Hop. Pitie, Paris, F-75634/13, Fr.
SOURCE:	Acta Endocrinologica (1980), 93(3), 264-70 CODEN: ACENA7; ISSN: 0001-5598
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB In a patient who presented clin. signs of an acquired panhypopituitarism which appeared 2 mo after a severe head trauma, the serum level of TSH was normal but showed a delayed rise after TRH administration. The serum prolactin level rose nomally after TRH administration, but showed a blunted response to both metoclopramide and the **insulin** tolerance test. Cortisol rose significantly after **lysine** vasopressin, but failed to rise during **insulin** hypoglycemia. Thus, a hypothalamic defect is indicated.

IT **6893-02-3**
RL: BIOL (Biological study)
(secretion of, in panhypopituitarism after head trauma,

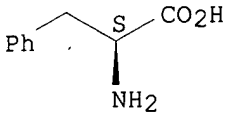
hypothalamus lesion in relation to)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



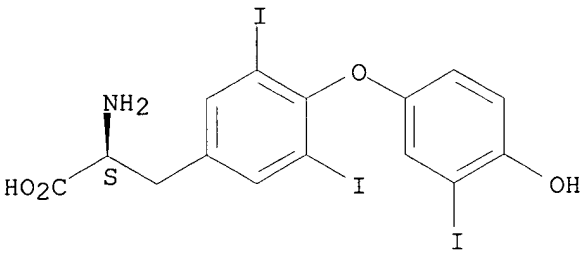
L42 ANSWER 50 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:85646 HCAPLUS
DOCUMENT NUMBER: 90:85646
TITLE: Dietary protein and energy effects on deer fawn metabolic patterns
AUTHOR(S): Seal, Ulysses S.; Verme, L. J.; Ozoga, J. J.
CORPORATE SOURCE: Res. Serv., VA Hosp., Minneapolis, MN, USA
SOURCE: Journal of Wildlife Management (1978), 42(4), 776-90
CODEN: JWMAA9; ISSN: 0022-541X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In white-tailed deer fawns (Odocoileus virginianus), 4 mo old, the effects of 10 wk of feeding of 2 levels each of protein and energy on blood and plasma compn. were detd. Twenty-three substances were not affected by the diets. Hb, mean corpuscular Hb concn., serum urea [57-13-6], and ornithine [70-26-8] were affected solely by protein content. Ca, P, alk. phosphatase [9001-78-9], alanine aminotransferase [9000-86-6], creatine phosphokinase [9001-15-4], nonesterified fatty acids, cortisol [50-23-7], triiodothyronine [**6893-02-3**], **insulin** [**9004-10-8**], isoleucine [73-32-5], leucine [61-90-5], **phenylalanine** [**63-91-2**], histidine [71-00-1], threonine [72-19-5], and glycine [56-40-6] were affected solely by the energy content. Erythrocyte no., mean corpuscular Hb, Na, Cl, and valine [72-18-4] were affected by both protein and energy content. Interaction effects were obsd. for glucose, cholesterol [57-88-5], citrulline [372-75-8], taurine [107-35-7], glutamic acid [56-86-0], aspartic acid [56-84-8], and glutamine [56-85-9]-asparagine [70-47-3]. The large no. of differences in blood constituents noted with respect to dietary energy and protein intake suggest that a small set of assays will allow evaluation of the nutritional status with respect to dietary protein and energy of wild deer populations.
IT **63-91-2**, biological studies **6893-02-3**
9004-10-8, biological studies
RL: BIOL (Biological study)
(of blood, of deer fawn, dietary energy and proteins effect on)
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 51 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1974:563799 HCAPLUS
DOCUMENT NUMBER: 81:163799
TITLE: Effects of hypophysectomy of liver donor on net synthesis of specific plasma proteins by the isolated perfused rat liver. Modulation of synthesis of albumin, fibrinogen, .alpha.1-acid glycoprotein, .alpha.2-(acute phase)-globulin, and haptoglobin by **insulin**, cortisol, triiodothyronine, and growth hormone
AUTHOR(S): Griffin, Edmond E.; Miller, Leon L.
CORPORATE SOURCE: Sch. Med. Dent., Univ. Rochester, Rochester, NY, USA
SOURCE: Journal of Biological Chemistry (1974), 249(16), 5062-9
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English

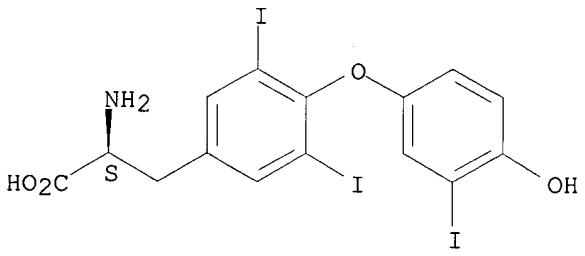
AB The isolated rat liver perfused for 12 or 24 hr was used to study effects of total hypophysectomy of the liver donor, and of added cortisol [50-23-7], growth hormone [9002-72-6], **insulin** [**9004-10-8**], and triiodothyronine [**6893-02-3**] on the net biosynthesis of five specific plasma proteins, namely, rat serum albumins, fibrinogen, .alpha.1-acid glycoprotein, .alpha.2-(acute phase) globulin, and haptoglobin. With all 4 hormonal supplements livers from fed hypophysectomized rats perfused at pH 7.10 synthesized about 50% as much albumin as livers from

normal donors. Similarly with a supplement including all 4 hormones, synthesis of fibrinogen, .alpha.1-acid glycoprotein, and haptoglobin was close to that obsd. in normals. Fibrinogen synthesis in the absence of triiodothyronine was not different from that with the 4 hormones; however, deletion of either **insulin** or growth hormone slightly but significantly decreased net synthesis below that seen with the 4 hormones. Deletion of either triiodothyronine, growth hormone, or **insulin** was assocd. with failure to increase synthesis of haptoglobin above that seen in the absence of all hormones at 12 hr, and at 24 hr was only 50% of that with supplementation by all 4 hormones. In the absence of hormone supplements synthesis of .alpha.2-(acute phase) globulin by livers from hypophysectomized donors was undetectable. With all 4 hormones, synthesis of this protein was not significantly different from that by livers of normal donors. Omission of either triiodothyronine, **insulin** , or growth hormone diminshed the net synthesis of the protein in a manner closely similar to that obsd. with haptoglobin. Of the 4 hormones, omission of **insulin** or growth hormone was reflected in a small but significant decrease in net uptake of free amino acid nitrogen. Strongly pos. N balance for the perfusion system was referable mainly to normal amino acid uptake concomitant with significantly decreased urea prodn. and to the presence of **insulin**. Absence of **insulin** (even in the presence of growth hormone, triiodothyronine, and cortisol) was assocd. with increased urea prodn., neg. N balance, and decreased incorporation of L-**lysine** into hepatic protein.

IT **6893-02-3 9004-10-8**, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(protein formation by liver response to)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 52 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1974:472828 HCAPLUS
DOCUMENT NUMBER: 81:72828
TITLE: Effects of a number of hormones on myocardial cell free protein biosynthesizing systems and on

the uptake of carbon-14-labeled **phenylalanine** into protein in the perfused heart system

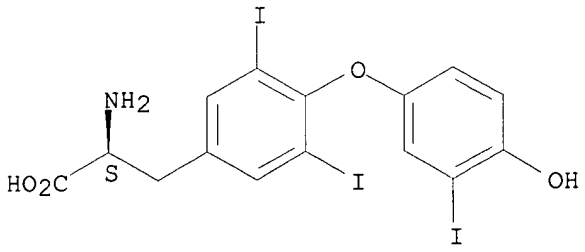
AUTHOR(S): Gibson, Keith; Harris, Peter
CORPORATE SOURCE: Cardiothoracic Inst., Univ. London, London, UK
SOURCE: Research Communications in Chemical Pathology and Pharmacology (1974), 8(2), 313-18
CODEN: RCOCB8; ISSN: 0034-5164
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effects of thyroxine [51-48-9], adrenaline [51-43-4], **insulin** [**9004-10-8**], corticosterone [50-22-6] and somatotropin [9002-72-6] on the uptake of **phenylalanine** -14C by the perfused rat heart and in cell free protein synthetic systems were examd. None of the hormones studied affected the uptake of **phenylalanine** by the perfused-rat heart. Only 3,5,3'-triiodothyronine [**6893-02-3**] inhibited aminoacyl-tRNA synthetase and transferring enzyme activity and the ability of the cytoplasm to facilitate the incorporation of **phenylalanine** into protein in the presence of a standard ribosomal preparation.

IT **6893-02-3 9004-10-8**, biological studies
RL: BIOL (Biological study)
(heart protein formation in response to)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 53 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:122147 HCAPLUS
DOCUMENT NUMBER: 76:122147
TITLE: Binding of thyrotropin-releasing hormone to plasma membranes of bovine anterior pituitary gland
AUTHOR(S): Labrie, Fernand; Barden, Nicholas; Poirier, Guy; De Lean, Andre
CORPORATE SOURCE: Fac. Med., Laval Univ., Quebec, QC, Can.
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1972), 69(1), 283-7

CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English

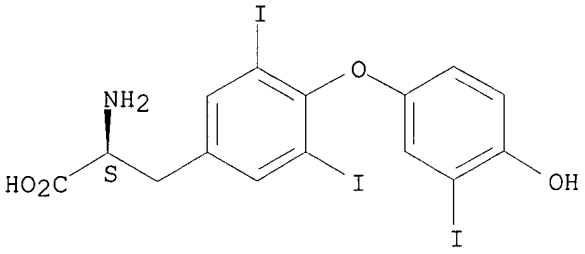
AB Plasma membranes isolated from bovine anterior pituitary gland bound 600 femtomol. 3H-labeled thyrotropin-releasing hormone (TRH) [24305-27-9]/mg protein compared with 15 femtomol./mg protein in the total adenohypophyseal homogenate. The equilibrium const. of membrane receptor-TRH binding at 0.deg. was 493 .tim. 107 L.M-1, giving a half-max. binding of this hormone at 23nM. Binding was time-dependent; addn. of unlabeled hormone induced dissocn. of the receptor-labeled TRH complex with a half-life of 14 min. The binding of TRH was not altered by 10 .mu.M MSH-release inhibiting hormone, **lysine** vasopressin [50-57-7], ACTH, growth hormone, prolactin, LH, **insulin**, glucagon [16941-32-5], L-thyroxine [51-48-9], or L-triiodothyronine [**6893-02-3**]. K+ [7440-09-7] and magnesium ions [7439-95-4] increased the formation of the receptor-TRH complex at optimal concns. of 5-25mM and 0.5-2.5mM, resp., with inhibition at higher concns. Calcium ions [7440-70-2] inhibited binding of TRH at all concns. tested. An assay for the binding of 3H-labeled TRH was described.

IT **6893-02-3**
RL: BIOL (Biological study)
(thyrotropin-releasing factor binding by anterior pituitary plasma membranes in relation to)

RN 6893-02-3 HCAPLUS

CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L42 ANSWER 54 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1971:138181 HCAPLUS

DOCUMENT NUMBER: 74:138181

TITLE: Tests for anterior pituitary gland function. II. Secretion of growth hormone (GH, luteinizing hormone(LH), follicle-stimulating hormone(FSH), and thyroid-stimulating hormone(TSH)

AUTHOR(S): Takebe, Kazuo; Suzuki, Kuniharu; Setaishi, Tomotoshi; Sakakura, Muneki

CORPORATE SOURCE: Sch. Med., Hokkaido Univ., Sapporo, Japan

SOURCE: Horumon to Rinsho (1971), 19(2), 127-33
CODEN: HORIAE; ISSN: 0045-7167

DOCUMENT TYPE: Journal

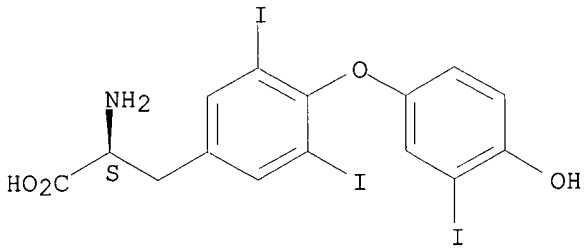
LANGUAGE: Japanese

AB A glucose (orally)-induced fall of blood GH, and an arginine- or

insulin-induced rise of blood GH were shown in results obtained with a normal group and dwarfism patients undergoing a GH-secretion test. Pyrogen and **lysine**-vasopressin barely altered blood GH level in normal subjects. Certain cases of dwarfism responded to arginine, but not to **insulin**. Pituitary secretion of gonadotropic hormones in male and female adults was not necessarily stimulated by administration of clomiphene or Premarin. Injection of triiodo-L-thyronine reduced blood TSH by a neg. feedback mechanism in euthyroid subjects but not in the hyperthyroids. Administration of antithyroid drug (thiouracil) failed to stimulate pituitary TSH secretion, but it increased thyroidal I uptake in the euthyroid, while the content of such stable I of the thyroid gland was diminished by TSH in the cases with latent hypothyroidism.

IT **6893-02-3**
RL: BIOL (Biological study)
(thyrotropic hormone secretion in response to, in hyperthyroidism)
RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



FILE 'CAOLD' ENTERED AT 15:47:17 ON 05 MAR 2003
L45 56 S L39

L45 ANSWER 1 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:15763d CAOLD
TI electrophysiol. studies on gonadotropin releasing mechanism
AU Kurachi, Keiichi; Nomoto, T.
IT 50-24-8 595-33-5 **6893-02-3**

L45 ANSWER 2 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:15762a CAOLD
TI absence of abnormal liver function test in steroids not alkylated in the 17-position
AU Marquardt, Gilbert H.; Logan, C. E.; Tomhave, W. G.; Dowben, R. M.
IT 303-42-4 **327-86-6** 434-05-9

L45 ANSWER 3 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:11099g CAOLD
TI lack of significant binding of L-triiodothyronine by thyroxine-binding globulin as demonstrated by acute disappearance of 131I-labeled triiodothyronine
AU Zaninovich, Angel A.; Farach, H. A.; Ezrin, C.; Volpe, R.
IT 57-41-0 **327-86-6** 517-18-0

L45 ANSWER 4 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:7764b CAOLD
TI disaccharide malabsorption syndrome as an expression of intestinal enzyme defect
AU Kistler, Hansjoerg; Haemmerli, U. P.
TI effects of .beta.-adrenergic receptor blockage in normal subjects before, during, and after triiodothyronine-induced hypermetabolism
AU Wilson, William R.; Theilen, E. O.; Hege, J. H.; Valenca, M. R.
IT **55-06-1** 110-46-3

L45 ANSWER 5 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:4204f CAOLD
TI influence of thyroid hormones and derivs. and of Ca++ on mitochondrial respiration and on the oxidn.-redn. state of nicotinamide adenine dinucleotide
AU Roche, Jean; Michel, R.; Huet, P.
IT 51-24-1 53-84-9 **327-86-6**

L45 ANSWER 6 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:4204d CAOLD
TI action of hormonal thyroid products on Ca fixation by mitochondria in the absence of inorg. phosphate
AU Roche, Jean; Michel, R.; Huet, P.
IT 51-24-1 **327-86-6** 27215-51-6

L45 ANSWER 7 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA65:261c CAOLD
TI transformation reactions and spontaneous labeling of iodophenols during thin-layer chromatography of 125I
AU Jacoby, Gertrude H.; Hickman, C. P., Jr.
IT 51-48-9 70-78-0 **6893-02-3**

L45 ANSWER 8 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:20285g CAOLD
TI carbohydrate metabolism in Lumbricus terrestris
AU Dastoli, Frank R.
TI metabolism and excretion of thyroxine and triiodothyronine
AU Hutchins, Max O.; Newcomer, W. S.
IT 67-30-1 **327-86-6**

L45 ANSWER 9 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:20144g CAOLD
TI chronic lesions and corticotropin-effects of thyroid hormones and elec. stimulation
AU D'Angelo, Savino A.; Young, R.
IT **327-86-6**

L45 ANSWER 10 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:18269d CAOLD
TI circadian analysis of phenobarbital-induced hyperkinesia
AU Millichap, J. Gordon; Millichap, P. A.
IT 50-06-6 50-67-9 **6893-02-3**

L45 ANSWER 11 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:18177f CAOLD
TI endemic seashore goiter in Hokkaido - (III)
AU Otaki, Sachiya

IT 70-78-0 **327-86-6**

L45 ANSWER 12 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:18170c CAOLD
TI biosynthesis and transport of thyroid hormones in thyroid carcinoma
AU Lemarchand-Beraud, Therese; Scazziga, B. R.; Vannotti, A.
IT **327-86-6** 3078-39-5

L45 ANSWER 13 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:18150h CAOLD
TI loss of organ-specific characteristics of hog thyroid cells during growth
AU Rabin, Bruce S.; Kite, J. H., Jr.; Rose, N. R.
IT 51-48-9 60-18-4 **327-86-6** 3078-39-5

L45 ANSWER 14 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:17935g CAOLD
TI synthesis of thyroxine from diiodotyrosine
AU Ochi, Sachio; Yokota, K.; Yatsutani, T.; Abe, S.
IT **327-86-6**

L45 ANSWER 15 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:17704g CAOLD
TI kinetics of formation of 3,5,3'-triiodothyronine from 3,5-diiodo-DL-thyronine
AU Behrens, Harold; Garcia, V.; Iturra, R.
IT 299-82-1 **3130-96-9** 5839-48-5 5839-49-6 91774-05-9

L45 ANSWER 16 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:16500g CAOLD
TI effect of some so-called antiproteolytic substances and hormones on secretion by the thyroid gland
AU Ruiz-Torres, A.; Oeff, K.
TI tumor resistance and the properdin level
AU Pfordte, Klaus; Matthies, E.
IT 50-33-9 **327-86-6**

L45 ANSWER 17 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:16435e CAOLD
TI organ proteins of human liver - their behavior and meaning in liver illnesses
AU Licht, Waldemar
IT 70-78-0 300-39-0 **327-86-6**

L45 ANSWER 18 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:14028f CAOLD
TI detn. of liothyronine and thyroxine in thyroid prepns.
AU Lemieux, Robert E.; Talmage, J. M.
IT **327-86-6**

L45 ANSWER 19 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:9509g CAOLD
TI quality and test method of radiopharmaceuticals - (I) paper chromatography of prepns. labeled with 131I and 125I
AU Urakubo, Goro; Kido, Y.; Hasegawa, A.
IT **327-86-6** 881-17-4 7230-65-1

L45 ANSWER 20 OF 56 CAOLD COPYRIGHT 2003 ACS

AN CA64:3945g CAOLD
TI adsorption of triiodothyronine-131I(T3) from serum by charcoal as a test of thyroid function
AU Herbert, Victor; Gottlieb, C. W.; Law, K. S.; Gilbert, P.; Silver, S.
IT **327-86-6**

L45 ANSWER 21 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA64:1152a CAOLD
TI effect of dysproteinemia on the response of the Hamolsky test
AU Sciascia, R.; Cabassa, N.
IT **327-86-6**

L45 ANSWER 22 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:18625h CAOLD
TI thin-layer chromatographic analysis of thyroidal iodoamino acids
AU Faircloth, Marjorie A.; Williams, A. D.; Florsheim, W. H.
IT **327-86-6** 487-19-4 534-51-0 831-12-9

L45 ANSWER 23 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:16715c CAOLD
TI posterior pituitary hormones - (VI) effects of compds. related to thyroxine on uterine inhibitory responses to posterior pituitary hormones
AU Aonuma, Shigeru; Mimura, T.; Okui, M.; Mori, J.; Sasahara, K.
IT **55-06-1** 949-67-7 1030-59-7 3943-89-3 3943-91-7 4142-95-4 4142-98-7 4143-00-4 4233-32-3

L45 ANSWER 24 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:6140g CAOLD
TI investigation of the functional state of the thyroid gland of triiodothyronine-131l
AU Modestov, V. K.; Tsygankov, A. T.
IT **1672-97-5**

L45 ANSWER 25 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:2279g CAOLD
TI thyrostatic effect of phenylbutazone and oxyphenbutazone under the influence of triiodo-thyronine
AU Eger, Wilhelm; Fernholz, J.
IT **327-86-6**

L45 ANSWER 26 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:2203f CAOLD
TI growth and function of thiouracil induced thyroid tumors transplanted into noninbred rats thymectomized at birth
AU Money, William L.; Typond, P.; Rawson, R. W.
IT **327-86-6**

L45 ANSWER 27 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:2017e CAOLD
TI bioluminescence
AU Zhuravlev, A. I.
TI fractionation of low-mol.-wt. I-contg. compds. in thyroid hydrolyzates
AU Karlsson, Rolf
IT **327-86-6**

L45 ANSWER 28 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA63:1861c CAOLD
TI C-glycosides of mono and polycyclic pyridines, their N-oxides, and corresponding esters
AU Treibs, Wilhelm
DT Patent

PATENT NO.	KIND	DATE
DE 1188600		

IT **327-86-6** 1094-61-7 3249-92-1 3387-36-8 3387-37-9
3387-38-0 3387-75-5

L45 ANSWER 29 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA62:16578b CAOLD
TI direct action of thyroxine analogs on molting in the adult newt
AU Couffer-Kaltenbach, Jane; Clark, N. B.
IT 51-24-1 51-26-3 67-09-4 67-30-1 88-82-4
101-66-6 299-79-6 299-80-9 299-82-1 300-39-0
327-86-6 609-23-4 618-51-9 618-76-8 1155-40-4
1158-10-7 1838-55-7 1948-39-6 2278-95-7 2279-02-9
2279-08-5 2279-11-0 2279-15-4 2389-84-6 2389-85-7
2389-86-8 2389-88-0 2390-01-4 2448-45-5

L45 ANSWER 30 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA62:15027b CAOLD
TI urinary excretion of 131I compds. after administration of thyroxine-131I
AU Blomstedt, B.
IT **327-86-6**

L45 ANSWER 31 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA62:14442b CAOLD
TI kinetics of formation of 3,3',5-triiodothyronine starting from 3,5-diiodothyronine
AU Garcia Maldonado, Victor
IT 299-82-1 **327-86-6** 939-97-9 950-07-2 1100-51-2

L45 ANSWER 32 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA62:13451e CAOLD
TI sepn. of thyroxine and its analogs by thinlayer chromatography
AU Heider, John G.; Bronk, J. R.
IT 51-24-1 67-30-1 **327-86-6**

L45 ANSWER 33 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA62:2126c CAOLD
TI effects of L-triiodothyronine on growth and radiosensitivity of tumors - (I), (II)
AU Shima, Takayoshi
IT 79-17-4 **6893-02-3**

L45 ANSWER 34 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA62:405f CAOLD
TI formulation of stable solns. of TMB-4
AU Dalgaard-Mikkelsen, Sv.
IT **1672-97-5**

L45 ANSWER 35 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA59:3802d CAOLD

TI prepn. of tritiated phenols - (II) synthesis of thyroid hormones labeled with T (DL-thyroxine and 3,3',5,-triiodothronine)
AU Nunez, Jacques; Jacquemin, C.; Roche, J.
IT 18878-01-8 97339-57-6 **98089-57-7**

L45 ANSWER 36 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA55:18858c CAOLD
TI assaying luteinizing hormone
AU Soliman, Fouad A.
IT **6893-02-3**

L45 ANSWER 37 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA55:15597h CAOLD
TI evaluation of the use of digitonin for the analysis of fecal sterols
AU Wells, William W.; Mores, P. A.
TI role of triiodothyronine-I131 purity in T-3 tests
AU Lee, Norman D.; Pileggi, V. J.
IT **16904-95-3**

L45 ANSWER 38 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA55:447h CAOLD
TI synthesis of triiodothyronine
AU Deutsch, Marshall E.
IT 24853-11-0 **66091-41-6** 115189-44-1

L45 ANSWER 39 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA54:12230e CAOLD
TI actions of thyroxine on oxidative phosphorylation
AU Bronk, J. Ramsey
IT 3734-78-9 **6893-02-3** 30135-78-5

L45 ANSWER 40 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA54:11131c CAOLD
TI possible errors in the detn. of red blood cell uptake of I131-triiodothyronine
AU Meade, Robert C.
IT **6893-02-3**

L45 ANSWER 41 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA54:9781e CAOLD
TI triiodothyronine
PA Glaxo Laboratories Ltd.
DT Patent
IT **6893-02-3**

L45 ANSWER 42 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA54:3580e CAOLD
TI experience with the erythrocyte uptake of I131-labeled l-triiodothyronine in a routine clin. lab.
AU Robbins, Leonard R.; Murphy, M. E.
IT **6893-02-3**

L45 ANSWER 43 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA54:2458h CAOLD
TI tetraiodothyroacetic acid, triiodothyroacetic acid, and oxidative phosphorylation
AU Bronk, J. Ramsey
IT **6893-02-3**

Searcher : Shears 308-4994

L45 ANSWER 44 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA54:315g CAOLD
TI reaction of cystine with Na2S in NaOH soln.
AU Rao, G. Satyanarayana; Gorin, G.
IT 534-51-0 **6893-02-3**

L45 ANSWER 45 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:20511i CAOLD
TI hormonal regulation of lipid and lipoprotein concn. of the blood
AU Pezold, Fritz A.
IT **6893-02-3**

L45 ANSWER 46 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:16443f CAOLD
TI binding of mixts. of iodoamino acids and of inorg. I by serum proteins
AU Block, Richard J.; Mandl, R. H.; Keller, S.
IT **6893-02-3** 6996-16-3 30135-78-5

L45 ANSWER 47 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:16441d CAOLD
TI uncoupling of oxidative phosphorylation by throxine and triiodothyronine in ultrasonic exts. of liver mitochondria
AU Park, Jane H.; Meriwether, B. P.; Park, C. R.
IT **6893-02-3**

L45 ANSWER 48 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:12135f CAOLD
TI triiodothyronine
AU Guglielmi, Gaetano; Meoni, G.
IT **6893-02-3**

L45 ANSWER 49 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:5508b CAOLD
TI adenosinetriphosphatase and morphological integrity of mitochondria
AU Maley, Gladys F.; Johnson, D.
IT 51-24-1 51-38-7 **6893-02-3** 96729-36-1

L45 ANSWER 50 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:4776b CAOLD
TI localization of thyroid hormones in organs and tissues
AU Ford, Donald H.; Corey, K. R.; Gross, J.
IT **6893-02-3**

L45 ANSWER 51 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:3874g CAOLD
TI oxazolopyrimidines
PA Burroughs Wellcome & Co. (U. S. A.) Inc.
DT Patent

PATENT NO.	KIND	DATE
US 2807616		1957

IT 4349-43-3 **6893-02-3** 18620-98-9 108540-44-9 108874-60-8 108955-44-8 109129-59-1 109259-11-2 110973-61-0 110973-70-1 114985-44-3 115164-09-5 116082-69-0 116598-61-9 117888-85-4 118726-33-3 118898-04-7 120208-41-5 120266-89-9 121761-16-8

L45 ANSWER 52 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:2982b CAOLD
TI sulfhydryl content and tryptic susceptibility of thermally denatured ovalbumin
AU Cunningham, Leon W.; Nuenke, B. J.; Strayhorn, W. D.
IT 101-66-6 **6893-02-3**

L45 ANSWER 53 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA52:2969d CAOLD
TI effect of thyroxine on isolated dehydrogenases
AU Wolff, Jacob; Wolff, E. C.
IT 51-24-1 76-59-5 76-60-8 87-87-6 115-39-9
608-71-9 1733-12-6 1955-21-1 2389-84-6 2553-71-1 2800-80-8
6893-02-3 6893-09-0 16423-68-0 17372-87-1 26836-01-1
30135-78-5 31395-16-1 93921-01-8 96729-36-1

L45 ANSWER 54 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA51:12857g CAOLD
TI synthesis and dehalogenation of iodothyronines - (I) DL-3'-monoiodothyronine and DL-3',5'-diiodothyronine, (II) DL-3-monoiodothyronine, DL-3,3'-diiodothyronine, and DL-3,3',5'-triiodothyronine, (III) catalytic deiodination of thyroxine
AU Roche, Jean; Michel, R.; Wolf, W.
IT 534-51-0 109066-55-9 109066-56-0 109067-23-4 109067-24-5
110056-83-2 110156-35-9 **110221-79-9**

L45 ANSWER 55 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA51:8166b CAOLD
TI abbreviations for iodinated amino acids and derivs. from the thyroid gland
AU Harington, C. R.; Pitt-Rivers, R.; Querido, A.; Roche, J.; Taurog, A.
TI mammalian cytochromes
AU Wainio, Walter W.; Cooperstein, S. J.
TI metabolic aspects of chem. genetics
AU DeBusk, A. Gib
TI ribonucleic acids and virus multiplication
AU Jeener, R.
TI xanthine oxidase
AU DeRenzo, Edward C.
IT 67-30-1 **6893-02-3** 24682-67-5 29354-16-3 30135-78-5
111031-85-7

L45 ANSWER 56 OF 56 CAOLD COPYRIGHT 2003 ACS
AN CA51:610i CAOLD
TI recovery of 3,3',5-triiodothyroacetic acid and 3,3'-diiodothyronine from the kidney after injection of 3,3',5-triiodothyronine
AU Roche, Jean; Michel, R.; Jouan, P.; Wolf, W.
IT 110032-26-3 **110221-79-9**

FILE 'USPATFULL' ENTERED AT 15:47:56 ON 05 MAR 2003
L46 319 SEA ABB=ON PLU=ON L39
L47 121 SEA ABB=ON PLU=ON L46 AND (L7 OR INSULIN OR PROINSULIN)
L48 41 SEA ABB=ON PLU=ON L47 AND (L10 OR PHENYLALANINE OR (PH OR PHENYL)(W)(ALA OR ALANINE) OR PHE OR LYS OR LYSINE OR B1 OR B29)

Searcher : Shears 308-4994

L48 ANSWER 1 OF 41 USPATFULL
ACCESSION NUMBER: 2003:40662 USPATFULL
TITLE: Method of treating psychological and metabolic disorders using IGF or IGF/IGFBP-3
INVENTOR(S): Mascarenhas, Desmond, Los Altos Hills, CA, United States
PATENT ASSIGNEE(S): Celtrix Pharmaceuticals, Inc., Glen Allen, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6518238	B1	20030211
APPLICATION INFO.:	US 1999-418861		19991015 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-88618, filed on 1 Jun 1998, now patented, Pat. No. US 6025332 Continuation-in-part of Ser. No. US 1997-837603, filed on 21 Apr 1997, now patented, Pat. No. US 6015786 Continuation-in-part of Ser. No. US 1997-805807, filed on 25 Feb 1997, now patented, Pat. No. US 6025368
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Gupta, Anish
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 1288
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for treating or alleviating the symptoms of subjects with psychological disorders, metabolic disorders, chronic stress-related disorders, sleep disorders, conditions associated with sexual senescence, aging, or premature aging by treating such subjects with IGF or mutant IGF either alone or complexed with IGFBP-3. Methods for increasing the levels of DHEA or DHEAS and treating or alleviating the symptoms of subjects with disorders characterized by low levels of DHEA or DHEAS by administering effective amounts of IGF or mutant IGF alone or complexed with IGFBP-3 are also provided. Methods for increasing the level of T4 and treating or alleviating the symptoms of subjects with disorders characterized by low levels of T3 or T4 by administering effective amounts of IGF or mutant IGF alone or complexed with IGFBP-3 are additionally provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 2 OF 41 USPATFULL
ACCESSION NUMBER: 2003:13208 USPATFULL
TITLE: Cell culture process
INVENTOR(S): Andersen, Dana C., Redwood City, CA, United States
Bridges, Tiffany M., Burlingame, CA, United States
Gawlitzek, Martin, Foster City, CA, United States
Hoy, Cynthia A., Hillsborough, CA, United States
PATENT ASSIGNEE(S): Genentech, Inc., South San Francisco, CA, United

States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6506598	B1	20030114	
APPLICATION INFO.:	US 2000-553924		20000421	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-131076P	19990426 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Schnizer, Holly
LEGAL REPRESENTATIVE: Hasak, Janet E.
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1876
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A glycoprotein is produced by a process comprising culturing mammalian host cells expressing nucleic acid encoding said glycoprotein in the presence of (a) a factor that modifies growth state in a cell culture, (b) a divalent metal cation that can adopt and prefers an octahedral coordination geometry, and/or (c) a plasma component. In this process, the occupancy of an N-linked glycosylation site occupied only in a fraction of a glycoprotein is enhanced. Such culturing is preferably carried out at a temperature of between about 30.degree. C. and 35.degree. C. and/or in the presence of up to about 2 mM of a butyrate salt and/or in the presence of a cell-cycle inhibitor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 3 OF 41 USPATFULL
ACCESSION NUMBER: 2002:322436 USPATFULL
TITLE: Method for assaying biological and other constituents using synthetic nucleounits in lateral flow, liquid, and dry chemistry techniques
INVENTOR(S): Smith, Jack V., Arden, NC, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002182600	A1	20021205	
APPLICATION INFO.:	US 2001-829563	A1	20010411	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JACK V. SMITH, P.O. BOX 156, Arden, NC, 28704
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 4896
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is a method for the use of particles made up of nucleotides or fragments of base groups of DNA and RNA molecules herein referred to as synthetic nucleounits which can be used as recognition molecules with specificity and sensitivity significantly greater than that of antibodies which are used in

clinical diagnostics, biotechnology, and research.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 4 OF 41 USPATFULL

ACCESSION NUMBER: 2002:186092 USPATFULL

TITLE: Active agent delivery systems and methods for protecting and administering active agents

INVENTOR(S): Piccariello, Thomas, Blacksburg, VA, UNITED STATES
Olon, Lawrence P., Bristol, TN, UNITED STATES
Kirk, Randal J., Radford, VA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002099013	A1	20020725	
APPLICATION INFO.:	US 2001-933708	A1	20010822	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-274622P	20010308	(60)
	US 2000-247621P	20001114	(60)
	US 2000-247620P	20001114	(60)
	US 2000-247595P	20001114	(60)
	US 2000-247594P	20001114	(60)
	US 2000-247635P	20001114	(60)
	US 2000-247634P	20001114	(60)
	US 2000-247606P	20001114	(60)
	US 2000-247607P	20001114	(60)
	US 2000-247608P	20001114	(60)
	US 2000-247609P	20001114	(60)
	US 2000-247610P	20001114	(60)
	US 2000-247611P	20001114	(60)
	US 2000-247702P	20001114	(60)
	US 2000-247701P	20001114	(60)
	US 2000-247700P	20001114	(60)
	US 2000-247699P	20001114	(60)
	US 2000-247698P	20001114	(60)
	US 2000-247807P	20001114	(60)
	US 2000-247833P	20001114	(60)
	US 2000-247832P	20001114	(60)
	US 2000-247927P	20001114	(60)
	US 2000-247926P	20001114	(60)
	US 2000-247930P	20001114	(60)
	US 2000-247929P	20001114	(60)
	US 2000-247928P	20001114	(60)
	US 2000-247797P	20001114	(60)
	US 2000-247805P	20001114	(60)
	US 2000-247804P	20001114	(60)
	US 2000-247803P	20001114	(60)
	US 2000-247802P	20001114	(60)
	US 2000-247801P	20001114	(60)
	US 2000-247800P	20001114	(60)
	US 2000-247799P	20001114	(60)
	US 2000-247798P	20001114	(60)
	US 2000-247561P	20001114	(60)
	US 2000-247560P	20001114	(60)
	US 2000-247559P	20001114	(60)

	US 2000-247558P	20001114 (60)
	US 2000-247556P	20001114 (60)
	US 2000-247612P	20001114 (60)
	US 2000-247613P	20001114 (60)
	US 2000-247614P	20001114 (60)
	US 2000-247615P	20001114 (60)
	US 2000-247616P	20001114 (60)
	US 2000-247617P	20001114 (60)
	US 2000-247633P	20001114 (60)
	US 2000-247632P	20001114 (60)
	US 2000-247631P	20001114 (60)
	US 2000-247630P	20001114 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Robert M. Schulman, Esq., Hunton & Williams, Suite 1200, 1900 K Street, N.W., Washington, DC, 20006-1100
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2048
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition comprising a polypeptide and an active agent covalently attached to the polypeptide. Also provided is a method for delivery of an active agent to a patient comprising administering to the patient a composition comprising a polypeptide and an active agent covalently attached to the polypeptide. Also provided is a method for protecting an active agent from degradation comprising covalently attaching the active agent to a polypeptide. Also provided is a method for controlling release of an active agent from a composition comprising covalently attaching the active agent to the polypeptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 5 OF 41 USPATFULL
ACCESSION NUMBER: 2002:178741 USPATFULL
TITLE: Gene identification
INVENTOR(S): Case, Casey C., San Mateo, CA, UNITED STATES
Urnov, Fyodor, Richmond, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002094529	A1	20020718
APPLICATION INFO.:	US 2001-941450	A1	20010828 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-395448, filed on 14 Sep 1999, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROBINS & PASTERNAK LLP, 90 MIDDLEFIELD ROAD, SUITE 200, MENLO PARK, CA, 94025
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 3838
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present disclosure provides methods and compositions for identifying a particular genomic sequence as a gene and/or a

coding region, once that sequence has been tentatively identified as a gene based on genomic analysis using one or more gene prediction algorithms. The methods include the use of exogenous molecules such as zinc finger proteins which are capable of binding to and modulating expression of gene transcription, targeted to putative gene sequences, followed by assay for one or more selected phenotypes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 6 OF 41 USPATFULL

ACCESSION NUMBER: 2002:129791 USPATFULL

TITLE: Serum-free culture medium for immortalized human colon epithelial cell line

INVENTOR(S): Blum, Stephanie, Lausanne, SWITZERLAND
Pfeifer, Andrea, St-Legier, SWITZERLAND
Tromvoukis, Yvonne, Effretikon, SWITZERLAND

PATENT ASSIGNEE(S): Nestac S.A., Vevey, SWITZERLAND (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6399381	B1	20020604
APPLICATION INFO.:	US 2000-593135		20000614 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-6886, filed on 14 Jan 1998, now abandoned Division of Ser. No. US 1997-839271, filed on 17 Apr 1997, now patented, Pat. No. US 6194203

	NUMBER	DATE
PRIORITY INFORMATION:	CH 1996-96201064	19960419

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Saucier, Sandra E.
ASSISTANT EXAMINER: Afremova, Vera
LEGAL REPRESENTATIVE: Winston & Strawn
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 923
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Human epithelial colon immortalized cell line, which does not express tumour markers, which expresses metabolic markers specific for the non-immortalized human epithelial cells and metabolic differentiation markers specific for the non-immortalized epithelial cells of the human colon, and which is capable of adhering in vitro to the strain of lactic acid bacterium CNCM-1225. Serum-free culture medium characterized in that it comprises trace elements, vitamins consisting of vitamin C and retinoic acid, and hormones consisting of triiodothyronine, dexamethasone, hydrocortisone, bovine pituary gland extract, **insulin**, EGF and transferrin. Process for the immortalization of epithelial cells of the human colon, in which a culture of primary epithelial cells derived from the human colon is prepared, the culture is infected with a recombinant virus, the immortalized cells are cultured in the serum-free culture medium according to the invention. Process for identifying the mutagenic,

toxic or beneficial effect of an agent on the metabolism of the cells of the intestinal tract, in which (1) an agent suspected of being a mutagenic, toxic or beneficial agent for the metabolism of the cells of the intestinal tract is reacted, cultured or brought into contact with a culture comprising a cell line according to the invention, and (2) the effects of the said agent on the said cell line are determined or measured. Use of the cells according to the invention as an active pharmaceutical agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 7 OF 41 USPATFULL

ACCESSION NUMBER:	2002:122484 USPATFULL
TITLE:	Immortalized human colon epithelial cell line
INVENTOR(S):	Blum, Stephanie, Lausanne, SWITZERLAND Pfeifer, Andrea, St-Legier, SWITZERLAND Tromvoukis, Yvonne, Effretikon, SWITZERLAND
PATENT ASSIGNEE(S):	Nestec S.A., Vevey, SWITZERLAND (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6395542	B1	20020528
APPLICATION INFO.:	US 2000-593134		20000614 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1997-839271, filed on 17 Apr 1997, now patented, Pat. No. US 6194203		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1996-201064	19960419

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Saucier, Sandra E.
ASSISTANT EXAMINER:	Afremova, Vera
LEGAL REPRESENTATIVE:	Winston & Strawn
NUMBER OF CLAIMS:	6
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:	898

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Human epithelial colon immortalized cell line, which does not express tumour markers, which expresses metabolic markers specific for the non-immortalized human epithelial cells and metabolic differentiation markers specific for the non-immortalized epithelial cells of the human colon, and which is capable of adhering in vitro to the strain of lactic acid bacterium CNCM-1225. Serum-free culture medium characterized in that it comprises trace elements, vitamins consisting of vitamin C and retinoic acid, and hormones consisting of triiodothyronine, dexamethasone, hydrocortisone, bovine pituary gland extract, **insulin**, EGF and transferrin. Process for the immortalization of epithelial cells of the human colon, in which a culture of primary epithelial cells derived from the human colon is prepared, the culture is infected with a recombinant virus, the immortalized cells are cultured in the serum-free culture medium according to the invention. Process for identifying the mutagenic, toxic or beneficial effect of an agent on the metabolism of the cells of the intestinal tract, in which (1) an agent suspected of

being a mutagenic, toxic or beneficial agent for the metabolism of the cells of the intestinal tract is reacted, cultured or brought into contact with a culture comprising a cell line according to the invention, and (2) the effects of the said agent on the said cell line are determined or measured. Use of the cells according to the invention as an active pharmaceutical agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 8 OF 41 USPATFULL

ACCESSION NUMBER:	2002:12521 USPATFULL
TITLE:	Combinations and methods for promoting in vivo liver cell proliferation and enhancing in vivo liver-directed gene transduction
INVENTOR(S):	Alison, Malcolm R., London, UNITED KINGDOM Coutelle, Charles, London, UNITED KINGDOM Forbes, Stuart J., London, UNITED KINGDOM Hodgson, Humphrey J.F., London, UNITED KINGDOM Sarosi, Ildiko, Newbury Park, CA, UNITED STATES Themis, Michael, Oxfordshire, UNITED KINGDOM
PATENT ASSIGNEE(S):	Amgen, Inc., Thousand Oaks, CA, UNITED STATES, 91320 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002006902	A1	20020117
APPLICATION INFO.:	US 2001-769204	A1	20010124 (9)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-256630, filed on 23 Feb 1999, GRANTED, Pat. No. US 6248725
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	LYON & LYON LLP, 633 WEST FIFTH STREET, SUITE 4700, LOS ANGELES, CA, 90071
NUMBER OF CLAIMS:	25
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	3 Drawing Page(s)
LINE COUNT:	986

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Combinations and methods for inducing a semi-synchronous wave of liver cell proliferation in vivo and combinations and methods for inducing a semi-synchronous wave of liver cell proliferation and achieving transduction of proliferating liver cells in vivo are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 9 OF 41 USPATFULL

ACCESSION NUMBER:	2001:93491 USPATFULL
TITLE:	Combinations and methods for promoting in vivo liver cell proliferation and enhancing in vivo liver-directed gene transduction
INVENTOR(S):	Alison, Malcom R., London, United Kingdom Coutelle, Charles, London, United Kingdom Forbes, Stuart J., Middlesex, United Kingdom Hodgson, Humphrey J. F., London, United Kingdom Sarosi, Ildiko, Thousand Oaks, CA, United States Themis, Michael, Buckinghamshire, United Kingdom
PATENT ASSIGNEE(S):	Amgen, Inc., Thousand Oaks, CA, United States

10/41 CONT'd

(U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6248725	B1	20010619	
APPLICATION INFO.:	US 1999-256630		19990223	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Martin, Jill
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1,11
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1186
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Combinations and methods for inducing a semi-synchronous wave of liver cell proliferation in vivo and combinations and methods for inducing a semi-synchronous wave of liver cell proliferation and achieving transduction of proliferating liver cells in vivo are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 10 OF 41 USPATFULL
ACCESSION NUMBER: 2001:29356 USPATFULL
TITLE: Immortalized adult human colon epithelial cell line
INVENTOR(S): Blum, Stephanie, Lausanne, Switzerland
Pfeifer, Andrea, St-Legier, Switzerland
Tromvoukis, Yvonne, Effretikon, Switzerland
PATENT ASSIGNEE(S): Nestec S.A., Vevey, Switzerland (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6194203	B1	20010227	
APPLICATION INFO.:	US 1997-839271		19970417	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1996-201064	19960419

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Saucier, Sandra E.
ASSISTANT EXAMINER: Afremova, Vera
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Immortalized adult human colon epithelial cell line, which does not express tumour markers, which expresses metabolic markers specific for the non-immortalized human epithelial cells and metabolic differentiation markers specific for the non-immortalized epithelial cells of the human colon, and which is capable of adhering in vitro to the strain of lactic acid bacterium CNCM-1225. Serum-free culture medium characterized in

that it comprises trace elements, vitamins consisting of vitamin C and retinoic acid, and hormones consisting of triiodothyronine, dexamethasone, hydrocortisone, bovine pituary gland extract, **insulin**, EGF and transferrin. Process for the immortalization of epithelial cells of the human colon, in which a culture of primary epithelial cells derived from the human colon is prepared, the culture is infected with a recombinant virus, the immortalized cells are cultured in the serum-free culture medium according to the invention. Process for identifying the mutagenic, toxic or beneficial effect of an agent on the metabolism of the cells of the intestinal tract, in which (1) an agent suspected of being a mutagenic, toxic or beneficial agent for the metabolism of the cells of the intestinal tract is reacted, cultured or brought into contact with a culture comprising a cell line according to the invention, and (2) the effects of the said agent on the said cell line are determined or measured. Use of the cells according to the invention as an active pharmaceutical agent. In particularly, cell line DSM ACC2258.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 11 OF 41 USPATFULL

ACCESSION NUMBER:	2000:57565 USPATFULL
TITLE:	Methods and compositions for isolation and growth of kidney tubule stem cells, in vitro kidney tubulogenesis and ex vivo construction of renal tubules
INVENTOR(S):	Humes, H. David, Ann Arbor, MI, United States
PATENT ASSIGNEE(S):	The University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6060270		20000509
APPLICATION INFO.:	US 1995-449912		19950525 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-844758, filed on 2 Mar 1992, now patented, Pat. No. US 5429938		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Crouch, Deborah		
ASSISTANT EXAMINER:	Martin, Jill D.		
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier & Neustadt, P.C.		
NUMBER OF CLAIMS:	41		
EXEMPLARY CLAIM:	1,15		
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 7 Drawing Page(s)		
LINE COUNT:	1017		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, including culture media conditions, which provide for isolation and purification of renal tubule stem cells and for in vitro kidney tubulogenesis are disclosed. The methods rely on culturing adult kidney cells in a culture media treated with combinations of transforming growth factor-.beta..sub.1, epidermal growth factor, and all-trans retinoic acid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 12 OF 41 USPATFULL

ACCESSION NUMBER: 2000:18417 USPATFULL
TITLE: Method for treating low circulating levels of sex hormone steroids associated with aging using IGF or IGF/IGFBP-3
INVENTOR(S): Mascarenhas, Desmond, Los Altos Hills, CA, United States
PATENT ASSIGNEE(S): Celtrix Pharmaceuticals, Inc., San Jose, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6025332		20000215
APPLICATION INFO.:	US 1998-88618		19980601 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-837603, filed on 21 Apr 1997 which is a continuation-in-part of Ser. No. US 1997-805807, filed on 25 Feb 1997
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Moezie, F. T.
LEGAL REPRESENTATIVE: Morrison&Foerster LLP
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 1357
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for treating or alleviating the symptoms of subjects with psychological disorders, metabolic disorders, chronic stress-related disorders, sleep disorders, conditions associated with sexual senescence, aging, or premature aging by treating such subjects with IGF or mutant IGF either alone or complexed with IGFBP-3. Methods for increasing the levels of DHEA or DHEAS and treating or alleviating the symptoms of subjects with disorders characterized by low levels of DHEA or DHEAS by administering effective amounts of IGF or mutant IGF alone or complexed with IGFBP-3 are also provided. Methods for increasing the level of T4 and treating or alleviating the symptoms of subjects with disorders characterized by low levels of T3 or T4 by administering effective amounts of IGF or mutant IGF alone or complexed with IGFBP-3 are additionally provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 13 OF 41 USPATFULL
ACCESSION NUMBER: 2000:7287 USPATFULL
TITLE: Method for increasing sex steroid levels using IGF or IGF/IGFBP-3
INVENTOR(S): Mascarenhas, Desmond, Los Altos Hills, CA, United States
Sanders, Martin, Hillsborough, CA, United States
PATENT ASSIGNEE(S): Celtrix Pharmaceuticals, Inc., San Jose, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6015786		20000118
APPLICATION INFO.:	US 1997-837603		19970421 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-805807, filed on 25 Feb 1997, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Moezie, F. T.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 1336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for treating or alleviating the symptoms of subjects with psychological disorders, metabolic disorders, chronic stress-related disorders, sleep disorders, conditions associated with sexual senescence, aging, or premature aging by treating such subjects with IGF or mutant IGF either alone or complexed with IGFBP-3. Methods for increasing the levels of DHEA or DHEAS and treating or alleviating the symptoms of subjects with disorders characterized by low levels of DHEA or DHEAS by administering effective amounts of IGF or mutant IGF alone or complexed with IGFBP-3 are also provided. Methods for increasing the level of T4 and treating or alleviating the symptoms of subjects with disorders characterized by low levels of T3 or T4 by administering effective amounts of IGF or mutant IGF alone or complexed with IGFBP-3 are additionally provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 14 OF 41 USPATFULL
ACCESSION NUMBER: 1999:170440 USPATFULL
TITLE: Cell culturing method and medium
INVENTOR(S): Curcio, Francesco, Pagnacco, Italy
Coon, Hayden G., East Sebago, ME, United States
Ambesi-Impiombato, F. Saverio, Udine, Italy
PATENT ASSIGNEE(S): Livercell L.L.C., East Sebago, ME, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6008047		19991228
APPLICATION INFO.:	US 1998-66897		19980428 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-480022, filed on 7 Jun 1993, now patented, Pat. No. US 5888816 which is a continuation of Ser. No. US 1993-83772, filed on 30 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-44010, filed on 8 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lankford, Jr., Leon B.
ASSISTANT EXAMINER: Tate, Christopher R.
LEGAL REPRESENTATIVE: Bundock Jr., John P.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 2290
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for producing an expanded non-transformed cell culture of human liver cells comprising the steps of: (1) preparing partially purified, minced human liver tissue, (2) concentrating the resulting cells and tissue pieces,

(3) resuspending the concentrated tissue cells and pieces in a growth medium, (4) culturing the resuspended cells in the growth medium for a time and under conditions to effect sustained cell division, and (5) passaging the cultured human liver cells periodically to expand the culture. The growth medium comprises a combination of a basal medium and ingredients to provide a medium in which the cultured human liver cells are selectively proliferated without being transformed, providing an expanded culture of proliferated, functionally differentiated human liver cells that is substantially free of fibroblast, macrophage and capillary endothelial cells. Also provided is the improvement of harvesting cells of the expanded culture at a selected PDL preferably>5, providing a high density cell suspension of such proliferated human liver cells, and incubating such high density cell suspension in a calm-down medium to induce a mitotically quiescent state and, using a culture procedure which encourages aggregation, making the cells adhere tightly to form a three-dimensional cell organization typical of the organ of origin, thereby forming organoids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 15 OF 41 USPATFULL

ACCESSION NUMBER:	1999:40236 USPATFULL
TITLE:	Cell cultures of and cell culturing method for nontransformed pancreatic, thyroid, and parathyroid cells
INVENTOR(S):	Coon, Hayden G., Gaithersburg, MD, United States Ambesi-Impiombato, Francesco Saverio, Tricesimo, Italy Curcio, Francesco, Pagnacco, Italy
PATENT ASSIGNEE(S):	Human Cell Cultures Inc., East Sebago, ME, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5888816		19990330
APPLICATION INFO.:	US 1995-480022		19950607 (8)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-83772, filed on 30 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-44010, filed on 8 Apr 1993, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Lankford, Jr., Leon B.
ASSISTANT EXAMINER:	Tate, Christopher R.
LEGAL REPRESENTATIVE:	Bundock, John P.
NUMBER OF CLAIMS:	34
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT:	1992

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for producing an expanded, enriched, non-transformed human cell culture of human pancreatic, thyroid or parathyroid endocrine cells and other types of cells which comprises (1) preparing partially purified, minced tissue that includes a desired type of cells; (2) concentrating the desired cells; (3) resuspending the concentrated cells in a growth

medium which selects in favor of the desired cells and in which those cells are proliferated without being transformed and differentiated functions are retained through periodic passaging; (4) culturing the resuspended cells in the growth medium to effect sustained cell division; and (5) passaging the cultured cells periodically to expand the culture. The present invention further provides clonal strains of cells derived from the above-mentioned cell culture and procedures to form matrix-embedded aggregated and non-aggregated cells for providing pseudotissues and products such as matrix-embedded pancreatic islets (pseudoislets). Growth medium and conditioned medium is provided for the culturing of the cells and clonal strains, the growth medium comprising a suitable basal medium supplemented with effective concentrations of hypothalamus and pituitary extracts, serum and other ingredients, which growth medium selects in favor of desired human cells and against passenger cells including fibroblast, macrophage, and capillary endothelial cells such that the desired cells are selectively proliferated without being transformed and an expanded cell culture is provided of functionally differentiated, expanded, non-transformed human cells that is substantially free of such passenger cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 16 OF 41 USPATFULL

ACCESSION NUMBER:	1999:21933 USPATFULL
TITLE:	Methods of treating autoimmune diseases and transplantation rejection
INVENTOR(S):	Singer, Dinah S., 6404 Ruffin Rd., Chevy Chase, MD, United States 20815 Kohn, Leonard, 9630 Parkwood Dr., Bethesda, MD, United States 20814 Mozes, Edna, 51 Hanachi Harishon, Rehovot, Israel 76303 Saji, Motoyasu, 10228 Rockville Pike, Rockville, MD, United States 20852 Weissman, Jocelyn, 3411 Janet Rd., Silver Spring, MD, United States 20906 Napolitano, Giorgio, 11315 Commonwealth Dr., Rockville, MD, United States 20852 Ledley, Fred D., 4911 Braesvalley, Houston, TX, United States 77096

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5871950		19990216
APPLICATION INFO.:	US 1995-460886		19950605 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-73830, filed on 7 Jun 1993, now abandoned		

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Leary, Louise
NUMBER OF CLAIMS:	5
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	33 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT:	1887

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods for treating autoimmune

diseases in mammals and for preventing or treating transplantation rejection in a transplant recipient. The methods of treatment involve the use of drugs capable of suppressing expression of MHC Class I molecules. In particular the use of the drug methimazole to suppress expression of MHC Class I molecules in the treatment of autoimmune diseases and the prevention or treatment of rejection in a transplant recipient is disclosed. In addition in vivo and in vitro assays are provided for the assessment and development of drugs capable of suppressing MHC Class I molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 17 OF 41 USPATFULL
ACCESSION NUMBER: 1998:157191 USPATFULL
TITLE: Cell cultures of and cells culturing method for nontransformed parotid cells
INVENTOR(S): Coon, Hayden G., Gaithersburg, MD, United States
Ambesi-Impiombato, Francesco Saverio, Tricesimo, Italy
Curcio, Francesco, Pagnacco, Italy
PATENT ASSIGNEE(S): Human Cell Cultures Inc., East Sebago, ME, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5849584		19981215
APPLICATION INFO.:	US 1995-485650		19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-83772, filed on 30 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-44010, filed on 8 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lankford, Jr., Leon B.
ASSISTANT EXAMINER: Tate, Christopher R.
LEGAL REPRESENTATIVE: Bundock, John P.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 1832
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for producing an expanded non-transformed cell culture comprising the steps of: (1) preparing partially purified, minced tissue; (2) concentrating the resulting cells and tissue pieces; (3) resuspending the concentrated tissue cells and pieces in a culture medium capable of supporting sustained cell division that is contained in a culture vessel; (4) incubating the cells; and (5) passaging the cells periodically. The present invention further provides clonal strains of cells derived from the above-mentioned cell culture, medium and conditioned medium designed for the culturing of parotid cells and other glandular cells such as pancreatic, thyroid, and parathyroid, and cells, and the use of cultured pancreatic cells to form pancreatic pseudotissues composed of matrix-embedded aggregated (pseudoislets) or individual cells, to treat blood sugar disorders in mammals, and to test for cytotoxicity and autoimmune activities with reference to pancreatic endocrine cells. The nontransformed cells are cultured

in a growth medium comprising a suitable basal medium supplemented with effective concentrations of hypothalamus and pituitary extracts, and serum.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 18 OF 41 USPATFULL
ACCESSION NUMBER: 1998:82596 USPATFULL
TITLE: Method of altering blood sugar levels using non-transformed human pancreatic cells that have been expanded in culture
INVENTOR(S): Coon, Hayden G., Gaithersburg, MD, United States
Ambesi-Impiombato, Francesco Saverio, Tricesimo, Italy
Curcio, Francesco, Pagnacco, Italy
PATENT ASSIGNEE(S): Human Cell Cultures Inc., East Sebago, ME, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5780299		19980714
APPLICATION INFO.:	US 1995-480027		19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1993-83772, filed on 30 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-44010, filed on 8 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lankford, Jr., Leon B.
ASSISTANT EXAMINER: Tate, Christopher R.
LEGAL REPRESENTATIVE: Bundock, John P.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 1828
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for producing an expanded non-transformed cell culture comprising the steps of: (1) preparing partially purified, minced tissue; (2) concentrating the resulting cells and tissue pieces; (3) resuspending the concentrated tissue cells and pieces in a culture medium capable of supporting sustained cell division that is contained in a culture vessel; (4) incubating the cells; and (5) passaging the cells periodically. The present invention further provides clonal strains of cells derived from the above-mentioned cell culture, medium and conditioned medium designed for the culturing of such cells, including pancreatic, thyroid, parathyroid, and parotid cells, and the use of cultured pancreatic cells to form pancreatic pseudotissues composed of matrix-embedded aggregated (pseudoislets) or individual cells, to treat blood sugar disorders in mammals, and to test for cytotoxicity and autoimmune activities with reference to pancreatic endocrine cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 19 OF 41 USPATFULL
ACCESSION NUMBER: 1998:61385 USPATFULL
TITLE: Human liver epithelial cell lines

INVENTOR(S): Harris, Curtis C., Bethesda, MD, United States
Cole, Katharine H., Dayton, MD, United States
Lechner, John F., Albuquerque, NM, United States
Reddel, Roger, St. Ives, Australia
PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5759765		19980602
APPLICATION INFO.:	US 1995-458878		19950602 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1993-25336, filed on 3 Mar 1993, now patented, Pat. No. US 5665589 which is a continuation-in-part of Ser. No. US 1992-879165, filed on 1 May 1992, now patented, Pat. No. US 5529920 which is a continuation of Ser. No. US 1989-377967, filed on 11 Jul 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-284368, filed on 14 Dec 1988, now abandoned And Ser. No. US 1988-284331, filed on 14 Dec 1988, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chambers, Jasemine C.
ASSISTANT EXAMINER: Schmuck, Jill D.
LEGAL REPRESENTATIVE: Townsend & Townsend & Crew
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 902
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Immortalized cell lines derived from normal adult human liver are described which express phenotypic characteristics of normal adult liver epithelial cells. The invention further provides methods of using the immortalized cells to evaluate the cytotoxicity or carcinogenicity of a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 20 OF 41 USPATFULL
ACCESSION NUMBER: 97:99017 USPATFULL
TITLE: Compositions and methods for improving autologous fat grafting
INVENTOR(S): Hirshowitz, Bernard, Haifa, Israel
Lindenbaum, Ella, Haifa, Israel
Har-Shai, Yaron, Haifa, Israel
PATENT ASSIGNEE(S): Life Medical Sciences, Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5681561		19971028
APPLICATION INFO.:	US 1995-475543		19950607 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Witz, Jean C.

Used

Searcher : Shears 308-4994

LEGAL REPRESENTATIVE: Coleman, Henry D., Sudol, R. Neil
NUMBER OF CLAIMS: 47
EXEMPLARY CLAIM: 1
LINE COUNT: 1336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to compositions and methods for enhancing the success of autologous fat grafting in a patient. The compositions according to the present invention are useful for enhancing autologous fat grafting by improving the survival rate of lipocytes which are injected into a patient as part of a fat grafting procedure. These compositions comprise a fat grafting effective amount of autologous lipocytes in combination with a lipocyte growth effective amount of a non-steroidal anabolic hormone selected from **insulin**, triiodothyronine/thyroxine (T.sub.3 or T.sub.4), mixtures thereof, and optionally, growth hormone, most preferably a mixture of all three hormones because of the favorable effect these three hormones exhibit in combination to promote autologous fat grafting, the hormones being further combined with a lipocyte growth effective amount of a nutrient medium, preferably a serum free nutrient medium as at least a minimum essential medium.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 21 OF 41 USPATFULL
ACCESSION NUMBER: 97:81141 USPATFULL
TITLE: Human liver epithelial cell lines
INVENTOR(S): Harris, Curtis C., Bethesda, MD, United States
Cole, Katharine H., Dayton, MD, United States
Lechner, John F., Albuquerque, NM, United States
Reddel, Roger, St. Ives, Australia
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5665589		19970909
APPLICATION INFO.:	US 1993-25336		19930303 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1992-879165, filed on 1 May 1992, now patented, Pat. No. US 5529920 which is a continuation of Ser. No. US 1989-377967, filed on 11 Jul 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-284368, filed on 14 Dec 1988, now abandoned And Ser. No. US 1988-284331, filed on 14 Dec 1988, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stanton, Brian R.
LEGAL REPRESENTATIVE: Birch, Stewart, Kolasch & Birch, LLP
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 898
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Immortalized cell lines derived from normal adult human liver are described which express phenotypic characteristics of normal adult

liver epithelial cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 22 OF 41 USPATFULL
ACCESSION NUMBER: 97:59097 USPATFULL
TITLE: Method for preparing an expanded culture and clonal strains of pancreatic, thyroid or parathyroid cells
INVENTOR(S): Coon, Hayden G., Gaithersburg, MD, United States
Ambesi-Impiombato, Francesco Saverio, Tricesimo, Italy
Curcio, Francesco, Pagnacco, Italy
PATENT ASSIGNEE(S): Human Cell Cultures, Inc., Gaithersburg, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5646035		19970708
APPLICATION INFO.:	US 1995-480149		19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-83772, filed on 30 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-44010, filed on 8 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rollins, John W.
ASSISTANT EXAMINER: Larson, Kristin
LEGAL REPRESENTATIVE: Leydig, Voit & Mayer, Ltd.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 1831
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for producing an expanded non-transformed cell culture comprising the steps of: (1) preparing partially purified, minced tissue; (2) concentrating the resulting cells and tissue pieces; (3) resuspending the concentrated tissue cells and pieces in a culture medium capable of supporting sustained cell division that is contained in a culture vessel; (4) incubating the cells; and (5) passaging the cells periodically. The present invention further provides clonal strains of cells derived from the above-mentioned cell culture, medium and conditioned medium designed for the culturing of such cells, including pancreatic, thyroid, parathyroid, and parotid cells, and the use of cultured pancreatic cells to form pancreatic pseudotissues composed of matrix-embedded aggregated (pseudoislets) or individual cells, to treat blood sugar disorders in mammals, and to test for cytotoxicity and autoimmune activities with reference to pancreatic endocrine cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 23 OF 41 USPATFULL
ACCESSION NUMBER: 97:12349 USPATFULL
TITLE: Dominant negative chimeras of the steroid/thyroid superfamily of receptors
INVENTOR(S): Evans, Ronald M., La Jolla, CA, United States

Hollenberg, Stanley M., Seattle, WA, United States
Oro, Anthony E., San Diego, CA, United States
Damm, Klaus, Munich, Germany, Federal Republic of
Heyman, Richard A., Encinitas, CA, United States

PATENT ASSIGNEE(S): The Salk Institute for Biological Studies, La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5602009		19970211	
APPLICATION INFO.:	US 1993-777232		19930510	(7)
	WO 1990-US3113		19900525	
			19930510	PCT 371 date
			19930510	PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1989-358696, filed on 26 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-289561, filed on 23 Dec 1988, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ulm, John
LEGAL REPRESENTATIVE: Pretty, Schroeder, Brueggemann & Clark, Reiter, Stephen E., Ramos, Robert T.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 1444
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are novel trans-repressing analog receptors wherein the ligand-binding domain(s) are modified versus wild type receptor, such novel receptors having repressed trans-activation transcription activation properties. Also disclosed are recombinant methods and means for preparing such receptors and assays using such receptors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 24 OF 41 USPATFULL
ACCESSION NUMBER: 97:1433 USPATFULL
TITLE: Compositions and methods for treating wounds
INVENTOR(S): Lindenbaum, Ella, Haifa, Israel
PATENT ASSIGNEE(S): Life Medical Sciences, Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5591709		19970107	
APPLICATION INFO.:	US 1995-374944		19950118	(8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-25216, filed on 2 Mar 1993, now abandoned Ser. No. Ser. No. US 1992-937486, filed on 28 Aug 1992, now abandoned And Ser. No. US 1993-158808, filed on 29 Nov 1993, now patented, Pat. No. US 5461030 which is a continuation of Ser. No. US 1991-752849, filed on 30 Aug 1991, now abandoned , said Ser. No. US -25216 which is a continuation-in-part of Ser. No. US -937486

which is a continuation-in-part of Ser. No. US -752849
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Russel, Jeffrey E.
LEGAL REPRESENTATIVE: Coleman, Henry D., Sudol, R. Neil
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT: 1602
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to wound treatment formulations and methods for treating wounds utilizing these formulations. The formulations according to the present invention are useful for treating wounds by accelerating wound healing. These formulations generally comprise an effective amount of a non-steroidal anabolic hormone such as **insulin**, growth hormone, triiodothyronine, thyroxine or mixtures thereof, in combination with a cellular nutrient medium, preferably MCDB 153.

Didn't use - NO COMBIN!

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 25 OF 41 USPATFULL
ACCESSION NUMBER: 96:85035 USPATFULL
TITLE: Methods for assessing the ability of a candidate drug to suppress MHC class I expression
INVENTOR(S): Singer, Dinah S., Chevy Chase, MD, United States
Kohn, Leonard, Bethesda, MD, United States
Mozes, Edna, Rehovot, IL, United States
Saji, Motoyasu, Rockville, MD, United States
Weissman, Jocelyn, Silver Spring, MD, United States
Napolitano, Giorgio, Rockville, MD, United States
Ledley, Fred D., Houston, TX, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5556754		19960917
APPLICATION INFO.:	US 1995-480525		19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-73830, filed on 7 Jun 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Myers, Carla
LEGAL REPRESENTATIVE: Morgan & Finnegan, L.L.P.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT: 2201
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods for treating autoimmune diseases in mammals and for preventing or treating transplantation rejection in a transplant recipient. The methods of treatment involve the use of drugs capable of suppressing expression of MHC

Class I molecules. In particular the use of the drug methimazole to suppress expression of MHC Class I molecules in the treatment of autoimmune diseases and the prevention or treatment of rejection in a transplant recipient is disclosed. In addition in vivo and in vitro assays are provided for the assessment and development of drugs capable of suppressing MHC Class I molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 26 OF 41 USPATFULL

ACCESSION NUMBER:	96:55677 USPATFULL
TITLE:	Human liver epithelial cell line and culture media therefor
INVENTOR(S):	Cole, Katharine H., Dayton, MD, United States Lechner, John F., Bethesda, MD, United States Reddel, Roger, Camperdown, Australia Harris, Curtis C., Bethesda, MD, United States Pfeifer, Andrea M., Pyrbaum, Germany, Federal Republic of
PATENT ASSIGNEE(S):	The United States of America as represented by the Secretary of the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5529920		19960625	
APPLICATION INFO.:	US 1992-879165		19920501	(7)
DISCLAIMER DATE:	20120303			
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-844873, filed on 3 Mar 1992, now patented, Pat. No. US 5342777 which is a continuation of Ser. No. US 1989-377967, filed on 11 Jul 1989, now abandoned which is a continuation of Ser. No. US 1988-284331, filed on 14 Dec 1988, now abandoned And a continuation of Ser. No. US 1988-284368, filed on 14 Dec 1988, now abandoned			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Chambers, Jasemine C.			
ASSISTANT EXAMINER:	Stanton, Brian R.			
LEGAL REPRESENTATIVE:	Birch, Stewart, Kolasch & Birch			
NUMBER OF CLAIMS:	22			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)			
LINE COUNT:	1381			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to long term multiplication and permanent establishment of a cell line of human liver epithelial cells(hepatocytes). The human liver epithelial cell line is capable of mitotically proliferating and continuously growing in vitro under suitable environmental conditions in suitable culture media. A method of producing an immortalized human liver epithelial cell line is also disclosed. The invention also relates to serum-free cell medium developed to support long term multiplication and permanent establishment of a cell line of human liver epithelial cells. The medium may contain an effective cell growth promoting amount of calcium ions; an effective cell growth

promoting amount of glucose; an effective amount of **insulin** to aid cells in glucose uptake; an effective cell growth promoting amount of hydrocortisone; an effective amount of epidermal growth factor to bind epidermal growth factor receptors on cells; an effective amount of transferrin to increase DNA synthesis in cells; an effective amount of cholera toxin to increase DNA synthesis in cells; an effective amount of triiodothyronine to increase DNA synthesis in cells; and an effective growth promoting amount of mammalian hormones and mitogenic factors, including lipoprotein, cholesterol, phospholipids and fatty acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 27 OF 41 USPATFULL

ACCESSION NUMBER:	94:88598 USPATFULL
TITLE:	Lyophilized ligand-receptor complexes for assays and sensors
INVENTOR(S):	Ligler, Frances S., Potomac, MD, United States Whelan, James P., Potomac, MD, United States
PATENT ASSIGNEE(S):	The United States of America as Represented by the Secretary of the Navy, Washington, DC, United States (U.S. government) U.S. Drug Testing, Inc., Rancho Cucamonga, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5354654		19941011	
APPLICATION INFO.:	US 1993-92518		19930716	(8)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Saunders, David
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier & Neustadt
NUMBER OF CLAIMS:	22
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:	1129

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A dry reagent prepared by lyophilizing a labelled ligand-immobilized receptor complex or a labelled receptor-immobilized ligand complex is, on rehydration, useful for detecting analytes in samples in a variety of displacement assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 28 OF 41 USPATFULL

ACCESSION NUMBER:	94:75459 USPATFULL
TITLE:	Cell culture medium for human liver epithelial cell line
INVENTOR(S):	Cole, Katharine H., Dayton, MD, United States Lechner, John F., Bethesda, MD, United States Harris, Curtis C., Bethesda, MD, United States
PATENT ASSIGNEE(S):	The United States of America as represented by the Secretary of the Dept. of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5342777		19940830
APPLICATION INFO.:	US 1992-844873		19920303 (7)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1988-284331, filed on 14 Dec 1988, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hill, Jr., Robert J.
ASSISTANT EXAMINER: Wang, Gian P.
LEGAL REPRESENTATIVE: Birch, Stewart, Kolasch & Birch
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 847
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to cell medium developed to support long term multiplication and permanent establishment of a cell line of human liver epithelial cells. The medium may contain an effective cell growth promoting amount of calcium ions; an effective cell growth promoting amount of glucose; an effective amount of insulin to aid cells in glucose uptake; an effective cell growth promoting amount of hydrocortisone; an effective amount of epidermal growth factor to bind epidermal growth factor receptors on cells; an effective amount of transferrin to increase DNA synthesis in cells; an effective amount of cholera toxin to increase DNA synthesis in cells; an effective amount of triiodothyronine to increase DNA synthesis in cells; and an effective growth promoting amount of mammalian hormones and mitogenic factors, including lipoprotein, cholesterol, phospholipids and fatty acids.

Too Broad

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 29 OF 41 USPATFULL
ACCESSION NUMBER: 92:99082 USPATFULL
TITLE: Endocrine manipulation to improve body composition of poultry
INVENTOR(S): Cogburn, Larry A., New London, PA, United States
PATENT ASSIGNEE(S): University of Delaware, Newark, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5168102		19921201
APPLICATION INFO.:	US 1990-583010		19900914 (7)

DISCLAIMER DATE: 20070529
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-521228, filed on 9 May 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-169737, filed on 18 Mar 1988, now patented, Pat. No. US 4929600
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Robinson, Douglas W.
ASSISTANT EXAMINER: Witz, Jean C.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 1483

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The body composition of poultry is improved by a hormonal strategy that includes the step of

increasing plasma levels of thyroid hormone to about 150-250% (normal endogeneous T.sub.3 hormone level=100%) during essentially the finishing phase (e.g., for chickens, 3 to 6 or 7 weeks-of-age) by administering (preferably orally) a metabolically-active thyroid hormone of the formula: ##STR1## wherein X is O, S, or CH.sub.2.

Z is C.sub.2 -C.sub.4 alkylene or amino-substituted C.sub.2 -C.sub.4 alkylene,

M.sup.+ is a physiologically acceptable cation, R.sub.3 and R.sub.5 are H or iodo, at least one of them being iodo,

R.sub.3 ' and R.sub.5 ' are iodo, or hydrogen or --A--COO--M.sup.30 , where A is C.sub.2 -C.sub.4 alkylene and M.sup.30 is a physiologically acceptable cation,

provided, that when R.sub.3 ', R.sub.5 ', R.sub.3 and R.sub.5 are all iodo, then Z--COO-- is the residue of the anion of acetic or propionic acid.

Marked depletion of body fat and increased body protein content are obtained with minimal loss of growth rate or efficiency of feed conversion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 30 OF 41 USPATFULL

ACCESSION NUMBER:	92:97013 USPATFULL
TITLE:	Endocrine manipulation to improve body composition of poultry
INVENTOR(S):	Cogburn, Larry A., New London, PA, United States
PATENT ASSIGNEE(S):	University of Delaware, Newark, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5162302		19921110	
APPLICATION INFO.:	US 1990-582488		19900914	(7)
DISCLAIMER DATE:	20070529			
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-521228, filed on 9 May 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-169737, filed on 18 Mar 1988, now patented, Pat. No. US 4129600			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Robinson, Douglas W.			
ASSISTANT EXAMINER:	Witz, Jean C.			
NUMBER OF CLAIMS:	11			
EXEMPLARY CLAIM:	1			
LINE COUNT:	1062			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The body composition of poultry is improved by a hormonal strategy

that includes the steps of

(a) increasing plasma levels of thyroid hormone to at least about 150% (normal endogenous T.sub.3 hormone level=100%) during essentially the finishing phase (e.g., for chickens, 3 to 6 or 7 weeks-of-age) by administering (preferably orally) a metabolically-active thyroid hormone of the formula: ##STR1## wherein X is O, S, or CH.sub.2. Z is C.sub.2 -C.sub.4 alkylene or amino-substituted C.sub.2 -C.sub.4 alkylene,

M.sup.+ is a physiologically acceptable cation,

R.sub.3 and R.sub.5 are H or iodo, at least one of them being iodo,

R.sub.3 ' and R.sub.5 ' are iodo, or hydrogen or --A--COO--M.sup.+, where A is C.sub.2 -C.sub.4 alkylene and M.sup.+ is a physiologically acceptable cation,

provided, that when R.sub.3 ', R.sub.5 ', R.sub.3 and R.sub.5 are all iodo, then Z--COO-- is the residue of the anion of acetic or propionic acid, and

(b) increasing endogenous growth hormone by: providing exogenous growth hormone releasing factor (GRF), at least during the finishing phase (and preferably only during the finishing phase) and/or providing exogenous (preferably dietary) thyrotropin releasing hormone (TRH) during the finishing phase, or utilizing gene insertion techniques which result in high levels of endogenous GRF or growth hormone at least during the finishing phase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 31 OF 41 USPATFULL

ACCESSION NUMBER:	92:31972 USPATFULL
TITLE:	Polypeptide-labeled analyte analog for carrying out an immunoassay
INVENTOR(S):	Farina, Peter R., North Salem, NY, United States Golke, James R., Yorktown Heights, NY, United States
PATENT ASSIGNEE(S):	Biopharma S.A., Luxembourg, Luxembourg (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5106950		19920421	
APPLICATION INFO.:	US 1988-214424		19880701	(7)
DISCLAIMER DATE:	20051115			
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1985-770016, filed on 29 Aug 1985, now patented, Pat. No. US 4785080 which is a continuation of Ser. No. US 1982-437484, filed on 28 Oct 1982, now abandoned which is a division of Ser. No. US 1981-248689, filed on 30 Mar 1981, now patented, Pat. No. US 4378428			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			

PRIMARY EXAMINER: Naff, David M.
LEGAL REPRESENTATIVE: Parmelee, Bollinger & Bramblett
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 2552
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A polypeptide-labeled analyte analog for use in an immunoassay is prepared which is capable of binding with a polypeptide partner to provide enzymatic activity such as a ribonuclease or .beta.-galactosidase activity. The polypeptide analog provides a highly sensitive, immunoassay method for determining the amount of an analyte in a sample containing a known analyte in an unknown concentration. To carry out an immunoassay, there is brought together in a medium a sample, the polypeptide-labeled analog of the analyte, an antibody specific for said analyte, a polypeptide partner capable of non-covalently binding with the polypeptide-labeled analyte analog to form a complex having catalytic activity, and a substrate capable of being converted to a reporter molecule by the catalytic activity of said complex. The polypeptide-labeled analyte analog is capable of competitively binding to the antibody and the polypeptide partner, the antibody inhibiting the formation of a catalytically active complex in the absence of analyte, and the concentrations of the antibody, polypeptide partner and polypeptide-labeled analyte are such as to cause varying amounts of analyte to be directly related to the conversion of the substrate to the reporter molecule. Conversion of the substrate to the reporter molecule is then determined, and compared to conversions of substrate to reporter molecule obtained with known concentrations of the analyte.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 32 OF 41 USPATFULL
ACCESSION NUMBER: 90:48835 USPATFULL
TITLE: Cancer therapy system for effecting oncolysis of malignant neoplasms
INVENTOR(S): Cone, Jr., Clarence D., Yorktown, VA, United States
PATENT ASSIGNEE(S): Therapeutical Systems Corporation, Yorktown, VA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4935450		19900619	
APPLICATION INFO.:	US 1988-234036		19880822	(7)

DISCLAIMER DATE: 20050209
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1987-130563, filed on 8 Dec 1987, now abandoned And Ser. No. US 1987-130290, filed on 8 Dec 1987, now abandoned which is a continuation of Ser. No. US 1985-792257, filed on 28 Oct 1985, now patented, Pat. No. US 4724234, issued on 9 Feb 1988 which is a continuation of Ser. No. US 1982-419324, filed on 17 Sep 1982, now abandoned , said Ser. No. 130563 which is a continuation of Ser. No. US 1984-634267, filed on 25 Jul 1984, now patented, Pat. No. US 4724230, issued on 9 Feb

1988 which is a continuation-in-part of Ser. No. 419324
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rollins, John W.
LEGAL REPRESENTATIVE: Venable, Baetjer, Howard & Civiletti
NUMBER OF CLAIMS: 172
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 4266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for effecting oncolysis, regression, and control of malignant neoplasms in humans and other mammals without adverse effects on normal body cells is described. An ATP-availability depressor may be combined with a defined nutritional regimen, a fatty acid blocker, an amino acid blocker, a lactate export blocker, or any combination thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 33 OF 41 USPATFULL
ACCESSION NUMBER: 90:42496 USPATFULL
TITLE: Endocrine manipulation to improve body composition of poultry
INVENTOR(S): Cogburn, Larry A., New London, PA, United States
PATENT ASSIGNEE(S): University of Deleware, Newark, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4929600		19900529	
APPLICATION INFO.:	US 1988-169737		19880318	(7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stone, Jacqueline M.
ASSISTANT EXAMINER: Witz, Jean
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 1380
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The body composition of poultry is improved by a hormonal strategy that involves either:

(1). increasing plasma levels of thyroid hormone by about 2- to 3-fold during the finishing phase (e.g., for chickens, 3 to 6 or 7 weeks-of-age) by providing feed containing 0.1 to 1 ppm of metabolically-active thyroid hormone of the formula: ##STR1## wherein R1 is the residue of a carboxylic acid such as an alpha-amino acid or an aliphatic carboxylic acid, e.g. L-alanine, D-alanine, acetic acid, or propionic acid

R3 is iodine (I)

R5 is iodine (I) or hydrogen (H)

R3' is iodine (I) or the residue of an aliphatic carboxylic acid such as butyric acid, or propionic acid

R5' is iodine (I) or hydrogen (H)

R4' is hydroxy (OH)

(2). increasing plasma levels of metabolically-active thyroid hormone by 2- to 3-fold and increasing plasma levels of growth hormone or glucagon by 2- to 10-fold for 15 to 30% of each day with any suitable method during the finishing phase of poultry growth.

Marked depletion of body fat and increased body protein content are obtained with minimal loss of growth rate or efficiency of feed conversion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 34 OF 41 USPATFULL

ACCESSION NUMBER:	88:74140 USPATFULL
TITLE:	Labeled analytes
INVENTOR(S):	Farina, Peter R., North Salem, NY, United States Golke, James R., Yorktown Heights, NY, United States
PATENT ASSIGNEE(S):	Baker Instruments Corporation, Allentown, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4785080		19881115
APPLICATION INFO.:	US 1985-770016		19850829 (6)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1982-437484, filed on 28 Oct 1982, now abandoned which is a division of Ser. No. US 1987-248689, filed on 30 Mar 1987, now patented, Pat. No. US 4378428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Wiseman, Thomas G.
ASSISTANT EXAMINER:	Teskin, Robin Lyn
LEGAL REPRESENTATIVE:	Rauchfuss, Jr., George W.
NUMBER OF CLAIMS:	54
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT:	2696

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A highly sensitive, immunoassay method for determining the amount of an analyte in a sample containing a known analyte in an unknown concentration is provided. Sample; a polypeptide-labeled analog of the analyte, an antibody specific for said analyte, a polypeptide partner capable of non-covalently binding with the polypeptide-labeled analyte to form a complex having catalytic activity, and a substrate capable of being converted to a reporter molecule by the catalytic activity of said complex are brought together in a medium. The polypeptide-labeled analyte analog is capable of competitively binding to the antibody and the polypeptide partner, the antibody inhibiting the formation of a catalytically active complex in the absence of analyte, and the concentration of the antibody, polypeptide partner and polypeptide-labeled analyte are such as to cause varying amounts of analyte to be directly related to the conversion of the

substrate to the reporter molecule. Conversion of the substrate to the reporter molecule is then determined, and compared to conversions of substrate to reporter molecule obtained with known concentrations of the analyte.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 35 OF 41 USPATFULL

ACCESSION NUMBER:	85:16408 USPATFULL		
TITLE:	Activated polymer container means and assay method employing the same		
INVENTOR(S):	Lee, Jin P., Troy, MI, United States		
PATENT ASSIGNEE(S):	Leeco Diagnostics, Inc., Southfield, MI, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4506019		19850319
APPLICATION INFO.:	US 1982-422801		19820924 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nucker, Christine M.		
LEGAL REPRESENTATIVE:	Krass and Young		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1,12		
LINE COUNT:	409		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel activated polyamide polymer container or test tube means and a method for the determination of ligand or analyte content in aqueous samples, are provided. The surfaces of the container tubes are specially activated thermally during their manufacture by injection molding thereby avoiding the need for subsequent coating of the tubes, e.g., with antibody, for binding assay procedures.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 36 OF 41 USPATFULL

ACCESSION NUMBER:	83:12982 USPATFULL		
TITLE:	Method for carrying out non-isotopic immunoassays, labeled analytes and kits for use in such assays		
INVENTOR(S):	Farina, Peter R., North Salem, NY, United States Golke, James R., Yorktown Heights, NY, United States		
PATENT ASSIGNEE(S):	Baker Instruments Corporation, Bethlehem, PA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4378428		19830329
APPLICATION INFO.:	US 1981-248689		19810330 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wiseman, Thomas G.		
LEGAL REPRESENTATIVE:	Rauchfuss, Jr., George W.		
NUMBER OF CLAIMS:	34		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 3 Drawing Page(s)		

LINE COUNT: 2661
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A highly sensitive, immunoassay method for determining the amount of an analyte in a sample containing a known analyte in an unknown concentration is provided. Sample; a polypeptide-labeled analog of the analyte, an antibody specific for said analyte, a polypeptide partner capable of non-covalently binding with the polypeptide-labeled analyte to form a complex having catalytic activity, and a substrate capable of being converted to a reporter molecule by the catalytic activity of said complex are brought together in a medium. The polypeptide-labeled analyte analog is capable of competitively binding to the antibody and the polypeptide partner, the antibody inhibiting the formation of a catalytically active complex in the absence of analyte, and the concentrations of the antibody, polypeptide partner and polypeptide-labeled analyte are such as to cause varying amounts of analyte to be directly related to the conversion of the substrate to the reporter molecule. Conversion of the substrate to the reporter molecule is then determined, and compared to conversions of substrate to reporter molecule obtained with known concentrations of the analyte.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 37 OF 41 USPATFULL
ACCESSION NUMBER: 80:54931 USPATFULL
TITLE: Methods for performing chemical assays using fluorescence and photon counting
INVENTOR(S): Dowben, Robert M., Dallas, TX, United States
Bunting, James R., Boston, MA, United States
PATENT ASSIGNEE(S): Diagnostic Reagents, Inc., Dallas, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4231750		19801104
APPLICATION INFO.:	US 1977-860168		19771213 (5)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1975-634797, filed on 24 Nov 1975, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Marantz, Sidney
LEGAL REPRESENTATIVE: Richards, Harris & Medlock
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 1014
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Improved methods for determining very low concentrations of substances present in fluid samples are provided by employing light emitting tracer compounds and (1) counting the photons emitted therefrom while discriminating against noise, nonspecific light, and quenching effects of the sample, or (2) counting the photons emitted therefrom over a predetermined integrated light flux, or a combination of (1) and (2). Further, novel fluorescently labeled low molecular weight antigens are provided which can be employed in competitive binding techniques in which the above described photon counting methods are useful. A homogeneous competitive binding assay, employing photon emitting

tracer materials, which eliminates the need for separating bound from unbound materials is also provided. Finally, a modified enzyme amplification technique is set forth employing enzymes active in the bound phase to provide assay techniques useful for extremely low concentration assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 38 OF 41 USPATFULL

ACCESSION NUMBER:	80:35679 USPATFULL
TITLE:	Reagent suitable for enzyme immuno assay
INVENTOR(S):	Kitagawa, Tsunehiro, Nagasaki, Japan
PATENT ASSIGNEE(S):	Dainippon Pharmaceutical Co., Ltd., Osaka, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4214048		19800722
APPLICATION INFO.:	US 1978-900167		19780426 (5)
RELATED APPLN. INFO.:	Division of Ser. No. US 1976-748135, filed on 6 Dec 1976, now patented, Pat. No. US 4150033		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1975-148787	19751212

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Wiseman, Thomas G.
LEGAL REPRESENTATIVE:	Stevens, Davis, Miller & Mosher
NUMBER OF CLAIMS:	18
EXEMPLARY CLAIM:	1,14,15,17
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT:	619

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel maleimidobenzoic acid N-hydroxysuccinimide ester of the formula: ##STR1## which is suitable as a binding agent for binding an enzyme and an antigen to give an enzyme-labeled antigen of the formula: ##STR2## wherein X and Y are different and are each an enzyme or an antigen, and an enzyme immuno assay using the enzyme-labeled antigen (II) and further a kit for the enzyme immuno assay which contains the enzyme-labeled antigen (II).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 39 OF 41 USPATFULL

ACCESSION NUMBER:	79:19190 USPATFULL
TITLE:	Reagent suitable for enzyme immuno assay
INVENTOR(S):	Kitagawa, Tsunehiro, Nagasaki, Japan
PATENT ASSIGNEE(S):	Dainippon Pharmaceutical Co., Ltd., Osaka, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4150033		19790417
APPLICATION INFO.:	US 1976-748135		19761206 (5)

	NUMBER	DATE

PRIORITY INFORMATION: JP 1975-148787 19751212
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Daus, Donald G.
ASSISTANT EXAMINER: Vaughn, Mary C.
LEGAL REPRESENTATIVE: Stevens, Davis, Miller & Mosher
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 551
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel maleimidobenzoic acid N-hydroxysuccinimide ester of the formula: ##STR1## which is suitable as a binding agent for binding an enzyme and an antigen to give an enzyme-labeled antigen of the formula: ##STR2## wherein X and Y are different and are each an enzyme or an antigen, and an enzyme immuno assay using the enzyme-labeled antigen (II) and further a kit for the enzyme immuno assay which contains the enzyme-labeled antigen (II).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 40 OF 41 USPATFULL
ACCESSION NUMBER: 78:16432 USPATFULL
TITLE: Solid phase column immunoassay procedure employing novel immunochemical composites
INVENTOR(S): Polito, Alan J., Costa Mesa, CA, United States
Knight, William S., Laguna Beach, CA, United States
PATENT ASSIGNEE(S): Beckman Instruments, Inc., Fullerton, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4081246		19780328	
APPLICATION INFO.:	US 1976-682830		19760503	(5)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Marantz, Sidney
LEGAL REPRESENTATIVE: Steinmeyer, Robert J., Frieman, Robert S.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 572
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An improved method of separating free from bound fractions in a solid phase column immunoassay procedure of the type wherein a solution is contacted with a composite comprising an activated polysaccharide matrix covalently coupled to a primary antibody, wherein the improvements comprise:

(a) coupling an .alpha.,.omega.-diaminospacer to said activated polysaccharide matrix via one of said .alpha.,.omega.-diamino-spacer's amino groups thereby forming a derivatized polysaccharide matrix; and

(b) covalently coupling said derivatized polysaccharide matrix to an antibody selected from a group consisting of primary and secondary antibodies via a bifunctional coupling agent having a formula ##STR1## WHEREIN N IS AN INTEGER FROM 1 AND 6 AND WHEREIN

E IS AN INTEGER FROM 1 TO 2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L48 ANSWER 41 OF 41 USPATFULL
ACCESSION NUMBER: 76:45295 USPATFULL
TITLE: Tyrosyl-class antigenic conjugates, their preparation and antibodies raised thereto
INVENTOR(S): Gross, Stanley Joseph, Encino, CA, United States
PATENT ASSIGNEE(S): Biological Developments, Inc., Encino, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3975342		19760817
APPLICATION INFO.:	US 1974-451812		19740318 (5)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1972-253632, filed on 15 May 1972, now abandoned which is a continuation-in-part of Ser. No. US 1970-89929, filed on 16 Nov 1970, now abandoned which is a continuation-in-part of Ser. No. US 1970-45558, filed on 11 Jun 1970, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Turner, V. D.
ASSISTANT EXAMINER: Fagelson, A. P.
LEGAL REPRESENTATIVE: McAulay, Fields, Fisher & Goldstein
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1,19
LINE COUNT: 625
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Tyrosyl, thyronine, and histidyl compounds of the formulas:
##SPC1##

Where R' is selected from the group consisting of --OH and --NHP.sub.p and R" is selected from the class consisting of --H and --COP.sub.p, where P.sub.p is a polypeptide chain having from 1 to 250 peptide groups, with or without pendant groups, X is selected from the class consisting of H and I; when X is I, X' is selected from the group consisting of H and I; and n is 0 or 1, where X' is H when n is 0; are conjugated to a carrier by first forming a primary aromatic amine on the carrier, diazotizing the amine, and coupling the tyrosyl, histidyl, or thyronine through the diazo group to form a novel antigenic conjugate. This novel antigenic conjugate can be injected into an animal for production of specific antibodies which are useful in assaying for the target, particularly by radioassaying.

REGISTRY

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'REGISTRY' ENTERED AT 15:49:03 ON 05 MAR 2003
=> e "3,3',5'-triiodothyronine"/cn 5

E1	1	3,3',5'-TRIIODO-D-THYRONINE/CN
E2	1	3,3',5'-TRIIODO-L-THYRONINE/CN
E3	2 -->	3,3',5'-TRIIODOTHYRONINE/CN
E4	1	3,3',5'-TRIIODOTHYRONINE GLUCURONIDE/CN
E5	1	3,3',5'-TRIIODOTHYROPROPIONIC ACID/CN

-Key terms

Searcher : Shears 308-4994

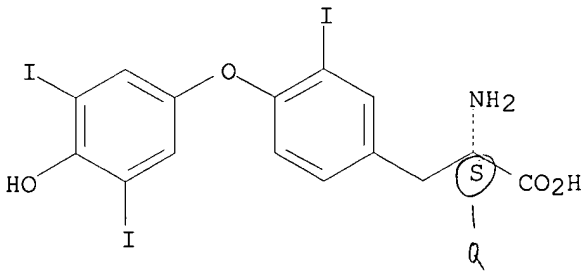
Actual Compound

```
=> s e3
L49          2 "3,3',5'-TRIIODOTHYRONINE"/CN

=> d 1-2 ide

L49  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2003 ACS
RN   5817-39-0  REGISTRY
CN   L-Tyrosine, O-(4-hydroxy-3,5-diiodophenyl)-3-iodo- (9CI)  (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
CN   Alanine, 3-[4-(4-hydroxy-3,5-diiodophenoxy)-3-iodophenyl]-, L- (8CI)
OTHER NAMES:
CN   3',5',3-Triiodothyronine
CN   3,3',5'-L-Triiodothyronine
CN   3,3',5'-T3
CN   3,3',5'-Triiodo-L-thyronine
CN   3,3',5'-Triiodothyronine
CN   Isoliothyronine
CN   Reverse L-triiodothyronine
CN   Reverse T3
CN   Reverse triiodothyronine
CN   rT3
FS   STEREOSEARCH
DR   2820-50-0
MF   C15 H12 I3 N O4
CI   COM
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT,
       CHEMCATS, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, PROMT,
       TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)

Absolute stereochemistry.
```

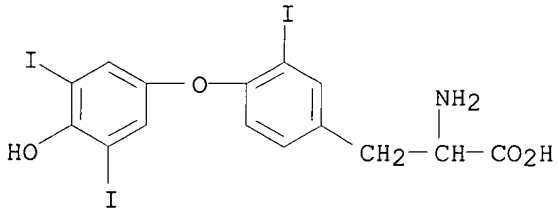



```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

            1504 REFERENCES IN FILE CA (1962 TO DATE)
               4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1505 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L49  ANSWER 2 OF 2  REGISTRY  COPYRIGHT 2003 ACS
RN   70-39-3  REGISTRY
CN   Tyrosine, O-(4-hydroxy-3,5-diiodophenyl)-3-iodo- (9CI)  (CA INDEX
     NAME)
```

OTHER CA INDEX NAMES:
CN Alanine, 3-[4-(4-hydroxy-3,5-diiodophenoxy)-3-iodophenyl]- (8CI)
OTHER NAMES:
CN **3,3',5'-Triiodothyronine**
CN DL-3,3',5'-Triiodothyronine
FS 3D CONCORD
DR 10466-27-0, 30804-64-9
MF C15 H12 I3 N O4
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, EMBASE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

92 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
92 REFERENCES IN FILE CAPLUS (1962 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

FILE 'HCAPLUS' ENTERED AT 15:49:58 ON 05 MAR 2003
L7 3170 SEA FILE=REGISTRY ABB=ON PLU=ON INSULIN ?/CN
L10 4 SEA FILE=REGISTRY ABB=ON PLU=ON (PHENYLALANINE OR LYSINE)/CN
L49 2 SEA FILE=REGISTRY ABB=ON PLU=ON "3,3',5'-TRIIODOTHYRONINE"/CN
L50 2228 SEA FILE=HCAPLUS ABB=ON PLU=ON L49 OR 3(1W)5(W)(TRIIODOTHYRONINE OR TRI(W)(IODOTHYRONINE OR IODO(W)THYRONINE) OR TRIIODO(W)THYRONINE)
L51 1278 SEA FILE=HCAPLUS ABB=ON PLU=ON (L50 OR T3 OR RT3) AND (L7 OR INSULIN OR PROINSULIN)
L52 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND (L10 OR PHENYLALANINE OR (PH OR PHENYL)(W)(ALA OR ALANINE) OR PHE OR LYS OR LYSINE OR B1 OR B29)

APPLIC. # Too New

L53 8 L52 NOT L42

L53 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:853110 HCAPLUS
TITLE: Relationships between the structure of **insulin** and its physiological effects. Thyronine **insulin** analogues
AUTHOR(S): Jones, R. H.; Shojaee-Moradie, F.
CORPORATE SOURCE: Neth.
SOURCE: Insulin & Related Proteins: Structure to Function and Pharmacology, [Alcuin Symposium], Aachen, Germany, Apr., 2000 (2002), Meeting Date

Searcher : Shears 308-4994

Good Query

2000, 121-130. Editor(s): Dieken, Markus Leyck; Federwisch, Matthias; De Meyts, Pierre. Kluwer Academic Publishers: Dordrecht, Neth.
CODEN: 69DGTL; ISBN: 1-4020-0655-1

DOCUMENT TYPE: Conference
LANGUAGE: English

AB The authors studied the biol. activity of **insulin** covalently linked to thyronines: N.alpha.**B1**-L-thyroxyl-**insulin** (T4-Ins) and N.alpha.**B1**-**rT3**-**insulin** (**rT3**-Ins). In vitro binding expts. using rat liver plasma membrane as a source of inulin receptor demonstrated that there were no significant differences between **insulin** and either of the analogs, indicating that the addn. of the thyroid moiety to the **B1** position of **insulin** did not decrease the capacity for normal assocn. with the **insulin** receptor. The analogs also bound to thyroid hormone-binding proteins. In human subjects, T4-Ins displayed a significant relative hepatoselectivity with no effect on the metabolic clearance rate of glucose. Also, a comparison of the fall in the concn. profiles of non-esterified free fatty acids confirm a decreased effect of T4-Ins on adipose tissue.

IT **9004-10-8, Insulin**
RL: BSU (Biological study, unclassified); BIOL (Biological study) (thyronine **insulin** analogs biol. activity in relation to structure)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:811275 HCAPLUS
DOCUMENT NUMBER: 132:50258
TITLE: Preparation of triiodothyronine derivative of **insulin**
INVENTOR(S): Jones, Richard Henry; Brandenburg, Dietrich; Shojaee-Moradi, Fariba; Kleinjung, Jens
PATENT ASSIGNEE(S): Kings College London, UK; Deutsches Wollforschungsinstitut
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965941	A1	19991223	WO 1998-GB1722	19980612
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2334859	AA	19991223	CA 1998-2334859	19980612

APPLIC.
0

AU 9880297 A1 20000105 AU 1998-80297 19980612
EP 1086130 A1 20010328 EP 1998-928469 19980612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2002518408 T2 20020625 JP 2000-554766 19980612
PRIORITY APPLN. INFO.: WO 1998-GB1722 A 19980612

AB **Insulin** covalently bound to **3,3',5'-triiodothyronine**, preferably at the **B1** residue, has been prepd. The conjugate is believed to be hepatoselective, while it retains **insulin** receptor binding properties.

IT **252878-62-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of triiodothyronine deriv. of **insulin**)

IT **252878-45-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of triiodothyronine deriv. of **insulin**)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:239077 HCAPLUS
DOCUMENT NUMBER: 128:307168
TITLE: .beta.-amyloid-binding laminin domains and their use in the diagnosis and treatment of amyloidoses
INVENTOR(S): Castillo, Gerardo; Snow, Alan D.
PATENT ASSIGNEE(S): University of Washington, USA
SOURCE: PCT Int. Appl., 132 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9815179	A1	19980416	WO 1997-US18145	19971008
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9747492	A1	19980505	AU 1997-47492	19971008
EP 959682	A1	19991201	EP 1997-910016	19971008
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1996-27981P P 19961008
WO 1997-US18145 W 19971008

AB A .beta.-amyloid-binding domain of the globular repeats of the laminin A chain is identified. The domain has uses in the diagnosis

? 0

Q- Don't know why came up - Searched to no T3/T4 or insulin

and treatment of Alzheimer's disease and related amyloidoses. Peptide analogs and antibodies to the domain may be of therapeutic and diagnostic use. The apparent dissocn. const. of laminin binding to immobilized .beta.-amyloid was 2.7 .times. 10-9 M. The precise domain involved was identified from proteolytic fragments of laminin. This binding inhibited the formation of .beta.-amyloid fibrils and could cause a dose-dependent dissoln. of pre-formed fibrils. Laminin had no effect on amylin fibril formation. Laminin fragments were found in the cerebrospinal fluid of Alzheimer's disease and type II diabetes patients but not in healthy controls.

L53 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:667263 HCAPLUS
DOCUMENT NUMBER: 127:322794
TITLE: Property-affecting and/or property-exhibiting compositions for therapeutic and diagnostic uses
INVENTOR(S): Rabbani, Elazar; Stavrianopoulos, Jannis G.; Donegan, James J.; Liu, Dakai; Kelker, Norman E.; Engelhardt, Dean L.
PATENT ASSIGNEE(S): Enzo Therapeutics, Inc., USA
SOURCE: Can. Pat. Appl., 275 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2190304	AA	19970616	CA 1996-2190304	19961114
EP 779365	A2	19970618	EP 1996-119961	19961212
EP 779365	A3	19991124		
R: DE, FR, GB, IT				
JP 09313190	A2	19971209	JP 1996-360043	19961216
US 2001006814	A1	20010705	US 1997-978633	19971125
US 2001006815	A1	20010705	US 1997-978634	19971125
US 2001006816	A1	20010705	US 1997-978637	19971125
US 2001007767	A1	20010712	US 1997-978632	19971125

PRIORITY APPLN. INFO.: US 1995-574443 A 19951215

AB Compns. useful for effecting and/or exhibiting changes in biol. functioning and processing in cells and biol. systems are provided which combine chem. modifications and/or ligand addns. with biol. functions in such a way as not to interfere substantially with the biol. functions. Such addnl. characteristics include nuclease resistance, targeting specific cells or cell receptors, and augmenting or decreasing interactions between the compns. and target cells. A title compn. may constitute a nucleotide, nucleotide analog, nucleic acid, natural or synthetic polymer, ligand, or conjugate of a ligand with any of the preceding. For example, single-stranded DNA from a plasmid contg. a gene of interest is complexed with an allylamine phosphoramidite-contg. oligonucleotide primer (complementary to a region of the DNA distant from the gene of interest) which has been modified with trilactosyllysyllysine (prepn. given), and the primer is extended with Klenow enzyme to form completely double-stranded DNA. On exposure of target cells to this DNA, the galactose moieties on the DNA bind to receptors on the cells, resulting in transport of the DNA into the cells. In another embodiment, DNA for antisense RNA sequences to regions of the HIV

genome were inserted into the U1 small nuclear RNA coding region and the DNA was used to transform U937 cells. The transformed cells were resistant to HIV infection, as shown by inhibition of virus replication and p24 antigen prodn.

IT **9004-10-8DP, Insulin**, conjugates with oligo(T), biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(property-affecting and/or property-exhibiting compns. for therapeutic and diagnostic uses)

L53 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:401185 HCAPLUS
DOCUMENT NUMBER: 121:1185
TITLE: A new structural type of zinc **insulin** observed in a mutant of [A21,Ser]-human **insulin**
AUTHOR(S): Wang, Da-cheng; Zeng, Zhong-hao; Hu, Yong-lin; Markussen, Jen
CORPORATE SOURCE: Inst. Biophys., Chin. Acad. Sci., Beijing, 100101, Peop. Rep. China
SOURCE: Pept.: Biol. Chem., Proc. Chin. Pept. Symp. (1993), Meeting Date 1992, 241-4. Editor(s): Du, Yu-cang; Tam, James P.; Zhang, You-shang. ESCOM: Leiden, Neth.
CODEN: 59YOAI
DOCUMENT TYPE: Conference
LANGUAGE: English

AB The hexameric zinc **insulin** structure obsd. in the [A21,Ser]-human **insulin** crystal represents a new type of T3R3 **insulin** conformational state (T3Rt3), in which the conformational pattern of the subunits are basically T3R3, except for a nonhelical stretch of **B1**-B3, but the coordination mode of zinc ions in the metal chelate sites adopts a T6-like type, namely 2 zinc ions are all on the 3-fold axis and both possess 6 ligands arranged as an octahedral array. In the **Rt3** structure, 6 coordination sites of zinc ion(II) are all occupied by the residues of **insulin** mol. itself, including 3 Asn-B3 and 3 His-B-10, which has not yet been obsd. in other hexameric **insulin** structures. The coordinate interactions between Asn-B3 and Zn(II) should be a significant factor for stabilizing the helical conformation of B4-B9 segment. It seems likely that the T3Rt3 structure represents particularly stable intermediate in the **T3** to R3 conformational transition, which may provide a new model for the investigation of the allosteric transition of **insulin**. A neutral org. mol., 1,4-dioxane, present in crystn. media is most probably the effector of **Rt3** conformation, which binds to a pocket on the hexamer surface and induces the conformation transition through hydrogen bonds.

IT **134091-11-5D**, hexamers, complexes with zinc
RL: PRP (Properties)
(conformation of)

L53 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:140040 HCAPLUS
DOCUMENT NUMBER: 118:140040

TITLE: Role of B13 Glu in **insulin** assembly. The hexamer structure of recombinant mutant (B13 Glu .fwdarw. Gln) **insulin**
AUTHOR(S): Bentley, G. A.; Brange, J.; Derewenda, Z.; Dodson, E. J.; Dodson, G. G.; Markussen, J.; Wilkinson, A. J.; Wollmer, A.; Xiao, B.
CORPORATE SOURCE: Inst. Pasteur, Paris, 75724, Fr.
SOURCE: Journal of Molecular Biology (1992), 228(4), 1163-76
CODEN: JMOBAK; ISSN: 0022-2836
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The assembly of the **insulin** hexamer brings the six B13 glutamate side-chains at the center into close proximity. Their mutual repulsion is unfavorable and zinc coordination to B10 histidine is necessary to stabilize the well known zinc-contg. hexamers. Since B13 is always a carboxylic acid in all known sequences of hexamer forming **insulins**, it is likely to be important in the hormone's biol. The mutation of B13 Glu .fwdarw. Gln leads to a stable zinc-free hexamer with somewhat reduced potency. The structures of the zinc-free B13 Gln hexamer and the 2Zn B13 **insulin** hexamer have been detd. by x-ray anal. and refined with 2.5 .ANG. and 2.0 .ANG. diffraction data, resp. Comparisons show that in 2Zn B13 Gln **insulin**, the hexamer structure (T6) is very like that of the native hormone. On the other hand, the zinc-free hexamer assumes a quaternary structure (**T3**/R3) seen in the native 4Zn **insulin** hexamer, and normally assocd. only with high chloride ion concns. in the medium. The crystal structures show that B13 Gln side-chains only contact water, in contrast to the B13 glutamate in 2Zn **insulin**. The solvation of the B13 Gln may be assocd. with this residue favoring helix at **B1** to B8. The low potency of the B13 Gln **insulin** also suggests the residue influences the hormone's conformation.

IT **12584-58-6D**, hexamers, complexes with zinc
72751-52-1D, hexamers, complexes with zinc
RL: PRP (Properties)
(conformation of)

L53 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:180681 HCAPLUS
DOCUMENT NUMBER: 114:180681
TITLE: Substitution of the conserved tryptophan 31 in Escherichia coli thioredoxin by site-directed mutagenesis and structure-function analysis
AUTHOR(S): Krause, Guenter; Holmgren, Arne
CORPORATE SOURCE: Dep. Physiol. Chem., Karolinska Inst., Stockholm, S-104 01, Swed.
SOURCE: Journal of Biological Chemistry (1991), 266(7), 4056-66
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English

AB All prokaryotic and eukaryotic thioredoxins contain a conserved tryptophan (W) residue, exposed at the active site disulfide/dithiol. The role of this W31 in E. coli thioredoxin (Trx) was studied by site-directed mutagenesis. Four mutant Trx with W31Y, W31F, W31H, and W31A replacements were characterized.

AB Two fistulated Holstein cows in midlactation were given 13 mg of impure aflatoxin **B1** (AFB1)(I) [1162-65-8] (AFB1 + other aflatoxins and metabolites produced by Aspergillus parasiticus in culture) for 7 days. Animals were bled daily and their blood was analyzed for serum glutamate-oxaloacetate transaminase, serum glutamate-pyruvate transaminase, alk. phosphatase, .gamma.-glutamyl transpeptidase, bilirubin, cholesterol, triglycerides, total protein, blood urea N, creatinine, and uric acid. Concns. of these constituents remained relatively unchanged during treatment. In the 2nd part of the study, 7 fistulated Holstein cows in midlactation were given daily doses of 13 mg of AFB1 for 7 days. Six animals received pure AFB1; 1 animal received impure AFB1. Amts. of 4 hormones (cortisol, **insulin**, T4, and **T3**), hormone binding capacity for **T3** (T3U), and glucose in serum were monitored. The amt. of **T3** and percent of T3U increased (12%) and decreased (4%), resp., during treatment. No discernible changes in amts. of T4, cortisol, **insulin**, and glucose were obsd. in the animals receiving pure AFB1. However, glucose levels in serum of the animal receiving impure AFB1 decreased by 9% during treatment. This decrease in serum glucose level was accompanied by a redn. in the amt. of milk produced. Overt signs indicative of ill health were not apparent, and thus could not be related to changes in blood constituents measured.

SAME SEARCH INTO MEDLINE ETC.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 15:54:53 ON 05 MAR 2003)

L54 49 S L52

L55 28 DUP REM L54 (21 DUPLICATES REMOVED)

& Indicate given together in Compos. even, like Hirshovitz et al.

L55 ANSWER 1 OF 28 WPIDS (C) 2003 THOMSON DERWENT

ACCESSION NUMBER: 2002-352006 [38] WPIDS
DOC. NO. CPI: C2002-100050
TITLE: Culture liquor for large-scale preparation of normal human matured liver cells, for in vitro studies and liver transplantation and artificial liver production in treating liver failure e.g. due to severe liver diseases in emergency.
DERWENT CLASS: B04 D16
INVENTOR(S): IKAI, I; KATSURA, N; MITAKA, T; YAMAOKA, Y
PATENT ASSIGNEE(S): (HOKK-N) HOKKAIDO TECHNOLOGY LICENSING OFFICE CO
COUNTRY COUNT: 97
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002024875	A1	20020328	(200238)*	JA	31
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001088072	A	20020402	(200252)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2002024875 A1	WO 2001-JP8168	20010920
AU 2001088072 A	AU 2001-88072	20010920

FILING DETAILS:

PATENT NO KIND		PATENT NO
AU 2001088072 A	Based on	WO 200224875

PRIORITY APPLN. INFO: JP 2000-288291 20000922
AN 2002-352006 [38] WPIDS
AB WO 200224875 A UPAB: 20020618
NOVELTY - A culture liquor for normal human matured liver cells contains human serum.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) another culture liquor for normal human matured liver cells containing essential amino acids, histidine, arginine or ornithine, glycine, proline, glutamine, cysteine, serine, human serum, nicotinamide, growth factor, **insulin** and adrenal cortical hormone; and

(2) the use of the culture liquor for culturing normal human matured liver cells.

ACTIVITY - Hepatotropic.

MECHANISM OF ACTION - None given in source material.

USE - The produced liver cells are for in vitro studies and efficient liver transplantation and artificial liver production in treating liver failure e.g. due to severe liver diseases including hepatitis in emergency.

ADVANTAGE - The culture liquor can applied in large-scale preparation of normal human matured liver cells with proliferation and maintenance while sustaining functions.

DESCRIPTION OF DRAWING(S) - Determination of the amount of albumin secreted into the medium by ELISA when human matured liver cells from start up to week 12, with William's E as control culture liquor in which albumin produced reached maximum on days 5-7 then gradually decreased to below detection level. (Drawing includes non-English language text).

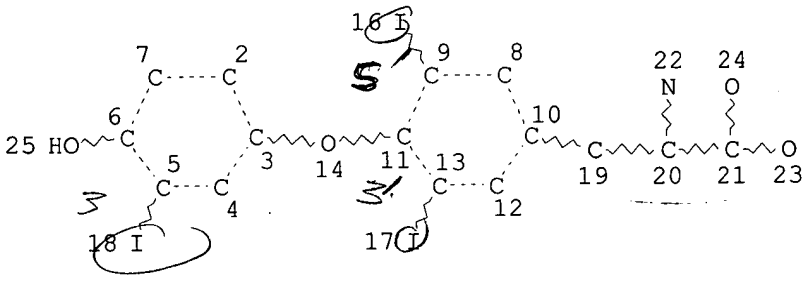
Dwg.1/3

L55 ANSWER 2 OF 28 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2002-668386 [72] WPIDS
CROSS REFERENCE: 1992-134049 [17]
DOC. NO. CPI: C2002-187891
TITLE: Culturing recombinant Chinese Hamster ovary cells to obtain product e.g., anti-CDw52 antibody involves growing the cells in medium free from protein, lipid and carbohydrate isolated from animal source including transferrin.
DERWENT CLASS: A96 B04 D16
INVENTOR(S): KEEN, M J; RAPSON, N T
PATENT ASSIGNEE(S): (WELL) WELLCOME FOUND LTD
COUNTRY COUNT: 14
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

Audet, M.
09/719423
4 searches (Diff. strategies / DB's)
2 54
56
41
8
28
187 Results
str.
54 results
for T3/rT3 →

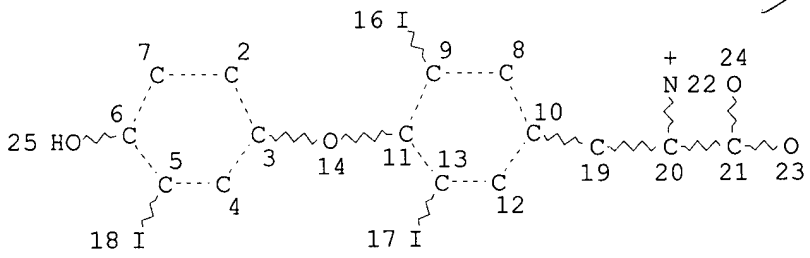
(FILE 'REGISTRY' ENTERED AT 15:41:14 ON 05 MAR 2003)
L3 STR



NODE ATTRIBUTES:
CONNECT IS X3 RC AT 2
CONNECT IS X3 RC AT 4
CONNECT IS X3 RC AT 7
CONNECT IS X3 RC AT 8
CONNECT IS X3 RC AT 12
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE
L6 539 SEA FILE=REGISTRY SSS FUL L3
L43 STR



NODE ATTRIBUTES:
CHARGE IS *+ AT 22
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 4
CONNECT IS X2 RC AT 7
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 12
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 23

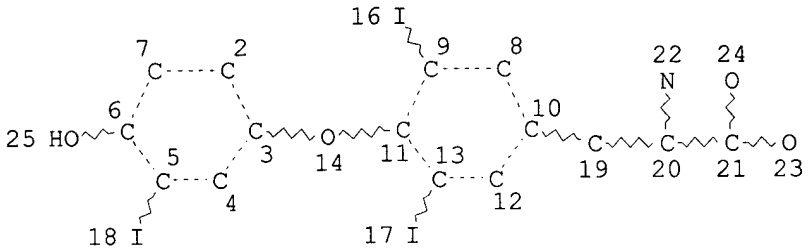
STEREO ATTRIBUTES: NONE
L44 0 SEA FILE=REGISTRY SUB=L6 SSS FUL L43

100.0% PROCESSED 539 ITERATIONS 0 ANSWERS

FILE 'REGISTRY' ENTERED AT 14:23:13 ON 05 MAR 2003
E INSULIN/CN
L7 3170 S INSULIN ?/CN

E PHENYLALANINE/CN 5
L10 4 S (PHENYLALANINE OR LYSINE)/CN

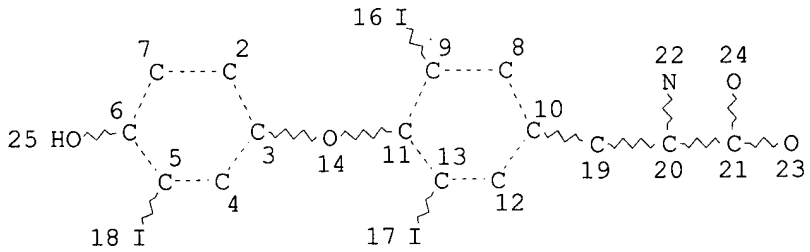
L3 STR



NODE ATTRIBUTES:
CONNECT IS X3 RC AT 2
CONNECT IS X3 RC AT 4
CONNECT IS X3 RC AT 7
CONNECT IS X3 RC AT 8
CONNECT IS X3 RC AT 12
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE
L6 539 SEA FILE=REGISTRY SSS FUL L3
L22 STR



NODE ATTRIBUTES:
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 4
CONNECT IS X2 RC AT 7
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 12
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I
NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE
L38 40 SEA FILE=REGISTRY SUB=L6 CSS FUL L22 ← Eliminates further subst.
L39 27 SEA FILE=REGISTRY ABB=ON PLU=ON L38 AND 2/NR ← Allows only two (2) rings to be present.

(FILE 'HCAPLUS' ENTERED AT 15:39:24 ON 05 MAR 2003)
L40 17947 SEA ABB=ON PLU=ON L39
L41 1805 SEA ABB=ON PLU=ON L40 AND (L7 OR INSULIN OR PROINSULIN)
L42 54 SEA ABB=ON PLU=ON L41 AND (L10 OR PHENYLALANINE OR (PH OR PHENYL)(W)(ALA OR ALANINE) OR PHE OR LYS OR LYSINE OR

E1 THROUGH E10 ASSIGNED

L42 ANSWER 1 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:928122 HCAPLUS
DOCUMENT NUMBER: 138:12504
TITLE: Method for assaying biomolecules and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemistry techniques
INVENTOR(S): Smith, Jack V.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 46 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

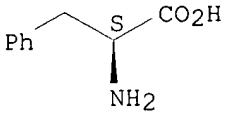
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002182600	A1	20021205	US 2001-829563	20010411

PRIORITY APPLN. INFO.: US 2001-829563 20010411

AB The present invention is a method for the use of particles made up of nucleotides or fragments of base groups of DNA and RNA mols. herein referred to as synthetic nucleounits which can be used as recognition mols. with specificity and sensitivity significantly greater than that of antibodies which are used in clin. diagnostics, biotechnol., and research. The method for detecting an analyte using nucleounits targeted to the analyte comprises (1) identifying a nucleounit from a mixt. of synthetic random sequences of nucleounit libraries, (2) conjugating the nucleounit to an indicator for the analyte, and (3) detecting the analyte using the nucleounit-indicator conjugate in a buffer. Step 1 is carried out by (a) contacting the analyte with the mixt. of synthetic random sequences of nucleounit libraries such that some nucleounits bind the analyte, (b) removing the unbound nucleounits by partitioning, and (c) amplifying the remaining nucleounits by PCR to obtain an enriched soln. of nucleounits with high affinity for the analyte. Thus, a method and lateral flow test strip for detection of cytomegalovirus (CMV) presence in a biol. sample such as serum or urine is described. The strip is prepd. with three solns., one contg. anti-CMV antibodies, one contg. "nucleounit to CMV antibody conjugated to red microparticles" and "red microparticles", and another contg. "nucleounit to colored particles". The "nucleounit" may be an oligonucleotide aptamer specific for anti-CMV antibodies.

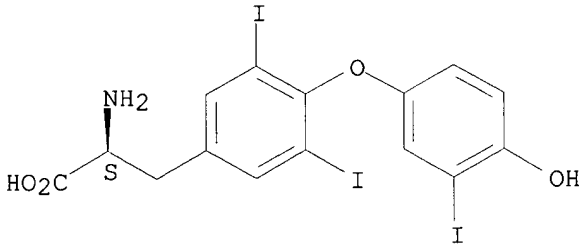
IT **63-91-2**, **Phenylalanine**, analysis **6893-02-3**
, **Triiodothyronine** **9004-10-8**, **Insulin**, analysis
59112-80-0, c-Peptide
RL: ANT (Analyte); ANST (Analytical study)
(method for assaying biomols. and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liq., and dry chem. techniques)
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 59112-80-0 HCAPLUS
CN Proinsulin C-peptide (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 2 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:556104 HCAPLUS
DOCUMENT NUMBER: 137:109489
TITLE: Compositions comprising a polypeptide and an active agent
INVENTOR(S): Piccariello, Thomas; Olon, Lawrence P.; Kirk, Randal J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 34 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002099013	A1	20020725	US 2001-933708		20010822
PRIORITY APPLN. INFO.:			US 2000-247556P	P	20001114
			US 2000-247558P	P	20001114
			US 2000-247559P	P	20001114
			US 2000-247560P	P	20001114
			US 2000-247561P	P	20001114
			US 2000-247594P	P	20001114
			US 2000-247595P	P	20001114
			US 2000-247606P	P	20001114
			US 2000-247607P	P	20001114
			US 2000-247608P	P	20001114
			US 2000-247609P	P	20001114
			US 2000-247610P	P	20001114
			US 2000-247611P	P	20001114
			US 2000-247612P	P	20001114
			US 2000-247620P	P	20001114
			US 2000-247621P	P	20001114
			US 2000-247634P	P	20001114
			US 2000-247635P	P	20001114
			US 2000-247698P	P	20001114
			US 2000-247699P	P	20001114
			US 2000-247700P	P	20001114
			US 2000-247701P	P	20001114
			US 2000-247702P	P	20001114
			US 2000-247797P	P	20001114
			US 2000-247798P	P	20001114
			US 2000-247799P	P	20001114
			US 2000-247800P	P	20001114
			US 2000-247801P	P	20001114
			US 2000-247802P	P	20001114
			US 2000-247803P	P	20001114
			US 2000-247804P	P	20001114
			US 2000-247805P	P	20001114
			US 2000-247807P	P	20001114
			US 2000-247832P	P	20001114
			US 2000-247833P	P	20001114
			US 2000-247926P	P	20001114
			US 2000-247927P	P	20001114
			US 2000-247928P	P	20001114
			US 2000-247929P	P	20001114
			US 2000-247930P	P	20001114

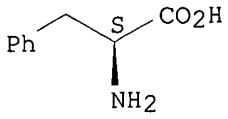
AB Claimed are compns. comprising a polypeptide and an active agent covalently attached to the polypeptide and a method for delivery of an active agent to a patient by administering the compn. to the patient. The peptide is a homopolymer of a naturally occurring amino acid or a heteropolymer of two or more naturally occurring amino acids. In an example, (Glu)n-cephalexin was prepd. from Glu(OBut)NCA and cephalexin hydrochloride.

IT **63-91-2**, L-**Phenylalanine**, reactions
6893-02-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(compns. comprising a polypeptide and an active agent)

RN 63-91-2 HCAPLUS

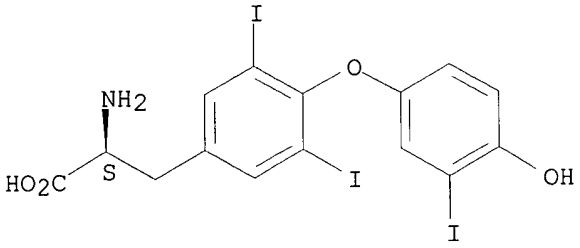
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT **133107-64-9**, **Insulin** lispro **169148-63-4**,
NN 304
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising a polypeptide and an active agent)
RN 133107-64-9 HCAPLUS
CN Insulin (human), 28B-L-lysine-29B-L-proline- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 169148-63-4 HCAPLUS
CN (1A-21A),(1B-29B)-Insulin (human), 29B-[N6-(1-oxotetradecyl)-L-lysine]- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 3 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:429047 HCAPLUS
DOCUMENT NUMBER: 137:2706
TITLE: Method and apparatus for multi-layer growth of anchorage-dependent cells
INVENTOR(S): Rappaport, Catherine; Trujillo, Edward; Rensch, Yvonne; Abbasi, Masoud; Kempe, Michael; Rocaboy, Christian; Gladysz, John
PATENT ASSIGNEE(S): University of Utah Research Foundation, USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044341	A2	20020606	WO 2001-US47061	20011113

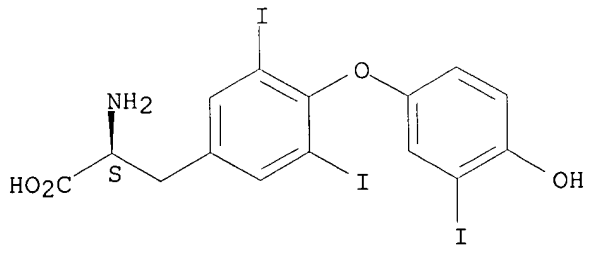
WO 2002044341 A3 20021114
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2002037705 A5 20020611 AU 2002-37705 20011113
PRIORITY APPLN. INFO.: US 2000-247829P P 20001113
WO 2001-US47061 W 20011113

AB Anchorage-dependent cells are grown in a novel cell culture plate and on a novel substratum which increase the oxygenation of the cells. The cell culture plate is made by enclosing a growth chamber within a shell made of a solid sterilizable. One or more culture wells are positioned within the chamber. An inlet port and outlet port are fashioned within the shell for gas exchange. The wells have a well wall which allows for the diffusion of oxygen from the chamber into the well. A perfluorocarbon is placed within the well. A perfluoro-aldehyde is mixed with the perfluorocarbon, and the perfluoro-aldehyde re-orients so that the aldehyde head groups are at the interface. An attachment factor is bound to the perfluoro-aldehyde, which is sunk into the PFC substratum. Aq. growth media is then added to the well, and anchorage-dependent cells added and allowed to grow.

IT **6893-02-3**, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method and app. for multi-layer growth of anchorage-dependent cells)

RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L42 ANSWER 4 OF 54 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:332011 HCAPLUS
DOCUMENT NUMBER: 136:355482
TITLE: Compositions comprising a polypeptide and an active agent
INVENTOR(S): Piccariello, Thomas; Olon, Lawrence P.; Kirk, Randall J.
PATENT ASSIGNEE(S): New River Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034237	A1	20020502	WO 2001-US26142	20010822
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001086599	A5	20020506	AU 2001-86599	20010822

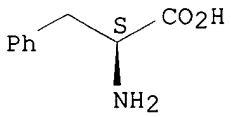
PRIORITY APPLN. INFO.: US 2000-642820 A 20000822
WO 2001-US26142 W 20010822

AB Claimed are compns. comprising a polypeptide and an active agent covalently attached to the polypeptide and a method for delivery of an active agent to a patient by administering the compn. to the patient. The peptide is a homopolymer of a naturally occurring amino acid or a heteropolymer of two or more naturally occurring amino acids. In an example, (Glu)n-cephalexin was prepd. from Glu(OBut)NCA and cephalexin hydrochloride.

IT **63-91-2**, L-**Phenylalanine**, reactions
6893-02-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(compns. comprising a polypeptide and an active agent)

RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

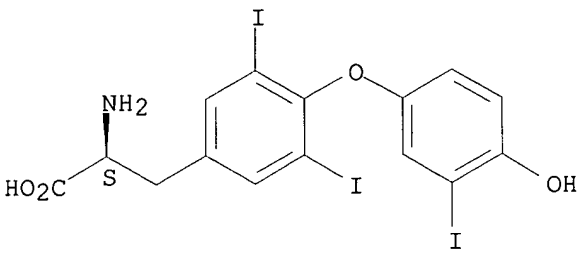
Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Searcher : Shears 308-4994



IT **133107-64-9, Insulin** lispro **169148-63-4,**
NN 304
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising a polypeptide and an active agent)
RN 133107-64-9 HCAPLUS
CN Insulin (human), 28B-L-lysine-29B-L-proline- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 169148-63-4 HCAPLUS
CN (1A-21A),(1B-29B)-Insulin (human), 29B-[N6-(1-oxotetradecyl)-L-lysine]- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 5 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:902726 HCAPLUS
DOCUMENT NUMBER: 136:113146
TITLE: Effects of bovine somatotropin and thyroid hormone status on hormone levels, body weight gain, and mohair fiber growth of Angora goats
AUTHOR(S): Puchala, R.; Prieto, I.; Banskalieva, V.; Goetsch, A. L.; Lachica, M.; Sahlu, T.
CORPORATE SOURCE: E (Kika) de la Garza Institute for Goat Research, Langston University, Langston, OK, 73050, USA
SOURCE: Journal of Animal Science (Savoy, IL, United States) (2001), 79(11), 2913-2919
CODEN: JANSAG; ISSN: 0021-8812
PUBLISHER: American Society of Animal Science
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Forty-eight Angora goats (24 wethers and 24 does; 5 mo old; 16 kg initial body wt.) were used in an expt. with a 2 .times. 3 factorial treatment arrangement to evaluate effects of recombinant bovine somatotropin (bST) administration and thyroid hormone status (euthyroid, hypothyroid, and hyperthyroid) on hormone (T3, T4, IGF-I, and insulin) levels, ADG, and mohair fiber growth. The bST was a slow-release zinc-based suspension, with sustained delivery (100 .mu.g/[kg/d]) over a 14-d period. Hyperthyroidism was maintained by daily treatment with thyroxine (T4; 150 .mu.g/[kg/d]), and hypothyroidism was achieved by feeding 6 mg/(kg/d) of propylthiouracil. The expt. was conducted in July to Sept. and consisted of a 2-wk pretreatment period and 8 wk of bST treatment.

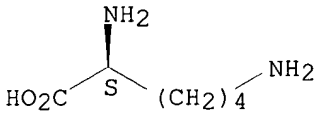
Searcher : Shears 308-4994

Goats were given ad libitum access to a diet with 15% CP and 2.54 Mcal/kg ME (DM basis). Concns. of T4 and T3 were greatest among treatments for hyperthyroid-bST and hyperthyroid-control (T4: 38.6 and 38.0 .mu.g/dL; T3: 406 and 385 ng/dL, resp.); similar among euthyroid-control, euthyroid-bST, and hypothyroid-bST (T4: 11.1, 11.5, and 9.8 .mu.g/dL, resp.; T3: 232, 252, and 226 ng/dL, resp.); and lowest for hypothyroid-control (T4: 5.1 .mu.g/dL; T3: 144 ng/dL). Plasma concn. of IGF-I was greatest for euthyroid-bST (596 ng/mL) and hypothyroid-bST (618 ng/mL); however, concn. for hyperthyroid-bST was similar to those for euthyroid-control, hypothyroid-control, and hyperthyroid-control (188, 178, 187, and 191 ng/mL, resp.). Dry matter intake was greatest for euthyroid-bST (794 g/d), similar among hypothyroid treatments (693 and 703 g/d for control and bST, resp.) and euthyroid-control (681 g/d), and lowest for hyperthyroid groups (554 and 518 g/d for control and bST, resp.); ADG for hyperthyroid goats (11 g/d) was lower than with hypothyroidism and euthyroidism (72 and 73 g/d, resp.); and mohair fiber growth was greater for hyperthyroidism (0.133 g/[100 cm2.cntdot.d]) than for hypothyroid and euthyroid goats (0.102 and 0.104 g/[100 cm2.cntdot.d], resp.). Hyperthyroidism also increased mohair length growth rate by 15% and decreased fiber diam. by 7.8%. These results demonstrate interactions between growth hormone administration and thyroid hormone status, although these influences had limited effects on ADG and mohair fiber growth.

IT **56-87-1, Lysine**, biological studies
63-91-2, Phenylalanine, biological studies
6893-02-3, Triiodothyronine **9004-10-8, Insulin**, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(somatotropin and thyroid hormone status effects on hormone levels and body wt. gain and mohair fiber growth of Angora goats)

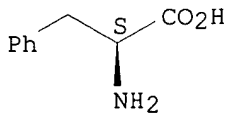
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



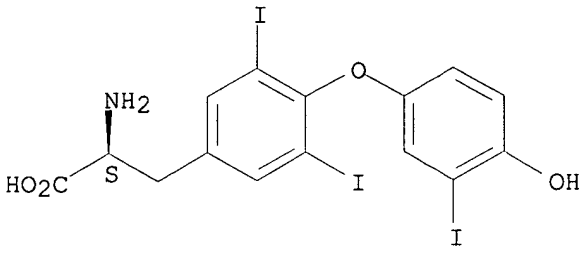
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 6 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:835872 HCAPLUS
DOCUMENT NUMBER: 136:166655
TITLE: Effects of supplying leucine and methionine to early-lactating cows fed silage-concentrate based diets with a calculated deficiency in leucine and methionine
AUTHOR(S): Krober, Thomas F.; Sutter, Franz; Senn, Markus; Langhans, Wolfgang; Kreuzer, Michael
CORPORATE SOURCE: Group of Animal Nutrition, Institute of Animal Sciences, Swiss Federal Institute of Technology (ETH), ETH Centre/LFW, Zurich, 8092, Switz.
SOURCE: Animal Research (2001), 50(1), 5-20
CODEN: ARNECU; ISSN: 1627-3583
PUBLISHER: EDP Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

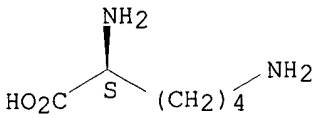
AB In a 2 .times. 2 factorial approach the productive and metabolic response of 24 multiparous Brown Swiss cows fed rations calcd. to be deficient in Leu (0.9-fold of requirements) and Met (0.8-fold) to supplementation either of one or both of these amino acids were investigated. On a dry matter basis the rations consisted of 29% grass silage, 20% corn silage, 6% hay, and 45% conc. Blood plasma amino acid data confirmed the intended difference in metabolic supply of Leu and Met keeping a low variation in the plasma levels of the other essential amino acids, particularly **Lys**. Live wt., milk yield as well as content and amt. of milk fat were not affected by the treatments. Content and amt. of milk protein were significantly reduced relative to initial level without addnl. Met. Nutrient digestibility and N balance remained widely unchanged by the supplementations. Except of plasma aspartate amino transferase, cholesterol, creatinine and ornithine, which responded to Met, hormones, enzyme activities as well as plasma, urine and milk metabolites were not systematically influenced by Leu and Met supply. The present results gave clearer indications for a deficiency in Met than in Leu.

IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, L-**Phenylalanine**, biological studies

6893-02-3, T3 **9004-10-8, Insulin,**
biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood; effects of supplying Leu and Met to early-lactating cows fed silage-conc. based diets with a calcd. deficiency in Leu and Met)

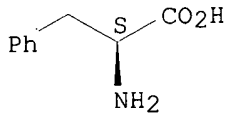
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



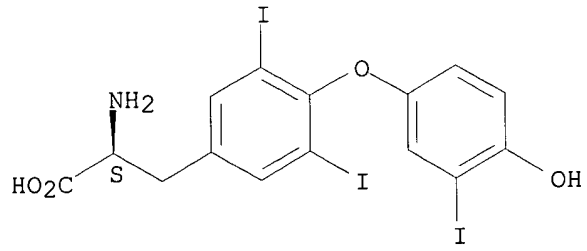
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 7 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:307161 HCAPLUS
DOCUMENT NUMBER: 135:303210
TITLE: Effects of medium-chain fatty acids on body composition and protein metabolism in overweight

rats

AUTHOR(S): Simon, E.; Fernandez-Quintela, A.; Del Puy Portillo, M.; Del Barrio, A. S.

CORPORATE SOURCE: Department of Nutrition & Food Science, University of the Basque Country, Vitoria, 01006, Spain

SOURCE: Journal of Physiology and Biochemistry (2000), 56(4), 337-346
CODEN: JPBIF2; ISSN: 1138-7548

PUBLISHER: Servicio de Publicaciones de la Universidad de Navarra

DOCUMENT TYPE: Journal

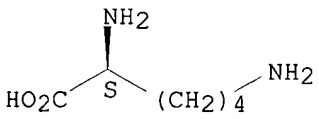
LANGUAGE: English

AB In order to obtain information about the effects of dietary fatty acid compn. on body fat and protein metab., overweight female rats were fed isoenergetic diets, using either medium-chain (MCT) or long-chain (LCT) triglycerides as a lipid source. After 23 days, the MCT group had mildly decreased body wt. but greatly reduced adipose tissue depots. All fat depots were significantly diminished. MCT-fed rats showed a decrease in some hormones involved in energy balance, such as leptin and triiodothyronine. Feeding MCT resulted in improvements in nitrogen balance. Muscle protein content was similar in both treatments despite an increase in protein degrdn. in the MCT group. The present data clearly show that a diet with MCT as lipid fuel depresses wt. gain and fat stores, relative to a std. LCT diet.

IT **56-87-1**, **Lysine**, biological studies
63-91-2, **Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(medium-chain fatty acids effect on body compn. and protein metab. in overweight rats)

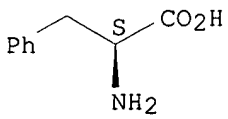
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

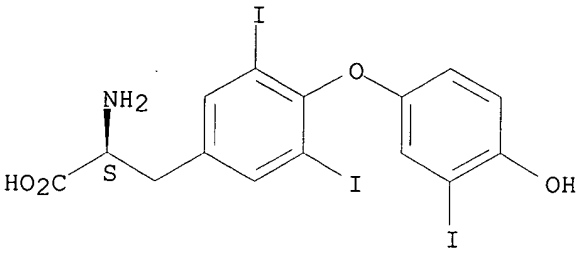
Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS

CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 8 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:234336 HCAPLUS
DOCUMENT NUMBER: 134:325670
TITLE: Whole-body protein metabolism and plasma profiles of amino acids and hormones in growing barrows fed diets adequate or deficient in **lysine**
AUTHOR(S): Roy, N.; Lapierre, H.; Bernier, J. F.
CORPORATE SOURCE: Departement des sciences animales, Faculte des sciences de l'agriculture et de l'alimentation, Universite Laval, Quebec, QC, G1K 7P4, Can.
SOURCE: Canadian Journal of Animal Science (2000), 80(4), 585-595
CODEN: CNJNAT; ISSN: 0008-3984
PUBLISHER: Agricultural Institute of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English

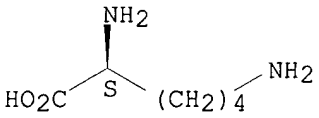
AB Eighteen growing barrows (body wt.: 26.6 .+-. 1.4 kg) were assigned (day 0) to one of three levels of dietary **lysine**: to be deficient (0.45%; L1), to achieve (0.75%; L2), or to exceed (0.98%; L3) National Research Council (NRC) (1988) **lysine** requirements (as-fed basis), according to a completely randomized block design. Nitrogen balance was measured over a 6-d period (days 10 to 16). On day 16, pigs were moved into respiratory chambers and received a 6-h continuous i.v. infusion of NaH13CO3 (1.66 .mu.mol h-1 kg-1, preceded by a priming dose of 2.35 .mu.mol kg-1) on day 17. The following day, pigs received an i.v. infusion of L-[1-13C]leucine (11.07 .mu.mol h-1 kg-1, preceded by a priming dose of 11.07 .mu.mol kg-1). Av. daily gain and nitrogen retention increased ($P < 0.10$) by 36 and 20%, resp., as dietary **lysine** content increased from L1 to L3. Leucine irreversible loss rate increased ($P < 0.05$) by 14% from diets L1 to L3, while leucine oxidn. remained const. ($P > 0.10$) between diets. In consequence, fractional oxidn. decreased ($P < 0.05$) by 20%, from L1 to L3.

Protein synthesis and degrdn. increased ($P < 0.05$) from diets L1 to L2, but the values for the diets L2 and L3 were similar. **Insulin** levels tended to increase from L1 to L3 ($P < 0.10$), while that of triiodothyronine decreased from diets L1 to L3 ($P < 0.05$). Daily feed intake, nutrient digestibility, energy metab. and plasma concns. of **insulin**-like growth factor 1 and growth hormone were not affected ($P > 0.10$) by treatments. In conclusion, the improvement in protein gain assocd. with increasing **lysine** supplementation to achieve **lysine** requirement involved a general stimulation of whole-body turnover, protein synthesis being increased to a larger extent than protein degrdn.

IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, L-**Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(whole-body protein metab. and plasma profiles of amino acids and hormones in growing barrows fed diets adequate or deficient in **lysine**)

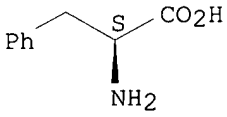
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



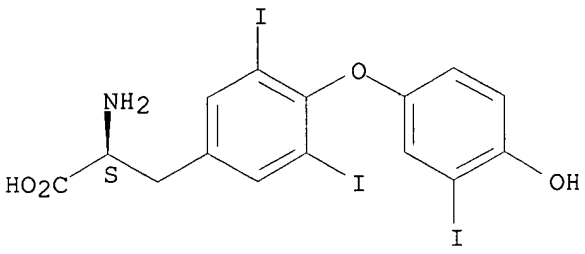
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 9 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:51619 HCAPLUS
DOCUMENT NUMBER: 134:207132
TITLE: Effects of rumen-protected methionine in a low protein ration on metabolic traits and performance of early lactating cows as opposed to rations with elevated crude protein content
AUTHOR(S): Krober, T. F.; Kreuzer, M.; Senn, M.; Langhans, W.; Sutter, F.
CORPORATE SOURCE: Institute of Animal Sciences, Animal Nutrition, ETH Zurich, Switz.
SOURCE: Journal of Animal Physiology and Animal Nutrition (2000), 84(5), 148-164
CODEN: JAPNEF; ISSN: 0931-2439
PUBLISHER: Blackwell Wissenschafts-Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

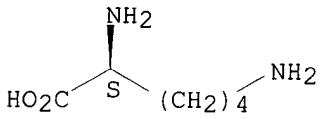
AB A 5-wk expt. with 24 multiparous early lactating Brown Swiss cows was conducted to investigate the effects of supplementary rumen-protected Met in conjunction with dietary protein redn. on metab. and performance after 1 wk of control measurement. Three rations contg. 175, 150 and 125 g of crude protein/kg feed dry matter were supplemented with Met. The fourth ration, also only contg. 125 g of crude protein/kg dry matter, remained unsupplemented. The four treatment groups had a similar metabolic supply of other essential amino acids, protein and energy, as calcd. by various approaches. The two low protein rations were, however, slightly deficient in ruminally degraded protein. Treatment effects remained low on feed intake, forage meal pattern, milk yield and fat as well as lactose content. In contrast, the content and yield of milk protein significantly declined only in the unsupplemented low protein ration relative to the initial value. Compared with this ration, the decline in milk protein yield was clearly delayed in the supplemented low protein ration. Blood plasma Met tended to be reduced without supplementation and to be increased with addnl. Met. Supplementation of Met reduced other plasma amino acids. Plasma **insulin**, glucose, lactate, ketone bodies and aspartate amino transferase activity indicated a certain liver stress and a somewhat

elevated energy requirement with high and particularly with low protein content (when unsupplemented). Met improved metabolic protein utilization, followed by the lowest plasma, urine and milk urea levels in the supplemented low protein diet. In conclusion, no major adverse effects were assessed under the conditions tested. Supplementation of Met may nevertheless be useful in rations with particularly low protein content fed to early lactating cows in order to prevent neg. long-term effects which were only visible here as trends.

IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, L-**Phenylalanine**, biological studies
6893-02-3, T3 **9004-10-8**, **Insulin**,
biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(blood; effect of Met in a low protein ration on metabolic traits and performance of early lactating cows as opposed to rations with elevated crude protein content)

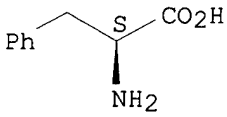
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



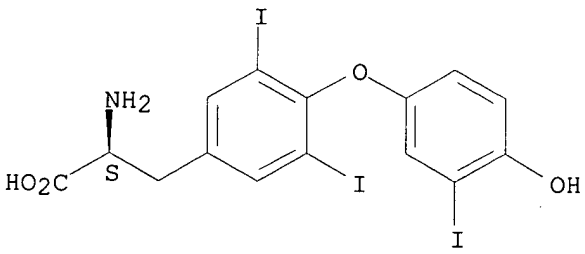
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS

CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 10 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:26748 HCAPLUS
DOCUMENT NUMBER: 134:217373
TITLE: The protein-retaining effects of growth hormone during fasting involve inhibition of muscle-protein breakdown
AUTHOR(S): Norrelund, Helene; Nair, K. Sreekumaran; Jorgensen, Jens Otto Lunde; Christiansen, Jens Sandahl; Moller, Niels
CORPORATE SOURCE: Medical Department M (Endocrinology and Diabetes), Aarhus Kommunehospital, Aarhus, DK-8000, Den.
SOURCE: Diabetes (2001), 50(1), 96-104
CODEN: DIAEAZ; ISSN: 0012-1797
PUBLISHER: American Diabetes Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The metabolic response to fasting involves a series of hormonal and metabolic adaptations leading to protein conservation. An increase in the serum level of growth hormone (GH) during fasting has been well substantiated. The present study was designed to test the hypothesis that GH may be a principal mediator of protein conservation during fasting and to assess the underlying mechanisms. Eight normal subjects were examd. on four occasions: in the basal postabsorptive state (basal), after 40 h of fasting (fast), after 40 h of fasting with somatostatin suppression of GH (fast-GH), and after 40 h of fasting with suppression of GH and exogenous GH replacement (fast+GH). The two somatostatin expts. were identical in terms of hormone replacement (except for GH), meaning that somatostatin, **insulin**, glucagon and GH were administered for 28 h; during the last 4 h, substrate metab. was investigated. Compared with the GH administration protocol, IGF-I and free IGF-I decreased 35 and 70%, resp., during fasting without GH. Urinary urea excretion and serum urea increased when participants fasted without GH (urea excretion: basal 392.+-.44, fast 440.+-.32, fast-GH 609.+-.76, and fast+GH 408.+-.36 mmol/24 h, $P < 0.05$; serum urea: basal 4.6.+-.0.1, fast 6.2.+-.0.1, fast-GH 7.0.+-.0.2, and fast+GH 4.3.+-.0.2 mmol/l, $P < 0.01$). There was a net release of **phenylalanine** across the forearm, and the neg. **phenylalanine** balance was higher during fasting with GH suppression (balance: basal 9.+-.3, fast 15.+-.6, fast-GH 17.+-.4, and fast+GH 11.+-.5 nmol/min, $P < 0.05$). Muscle-protein breakdown was increased among participants who fasted without GH (**phenylalanine** rate of appearance: basal 17.+-.4, fast 26.+-.9, fast-GH 33.+-.7, fast+GH 25.+-.6 nmol/min, $P < 0.05$). Levels of free fatty acids and oxidn. of lipid decreased during fasting without GH ($P < 0.01$). In summary, the authors find that suppression of GH during fasting leads to a 50% increase in urea-nitrogen excretion, together with an increased net release and appearance rate of **phenylalanine** across the forearm. These results demonstrate that GH-possibly by maintenance of

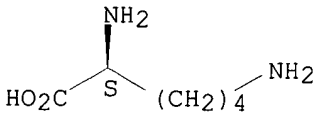
circulating concns. of free IGF-I-is a decisive component of protein conservation during fasting and provide evidence that the underlying mechanism involves a decrease in muscle protein breakdown.

IT **9004-10-8, Insulin,** biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(protein-retaining effects of growth hormone during fasting involve inhibition of muscle-protein breakdown in humans in relation to underlying mechanism)
RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

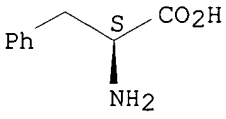
IT **56-87-1,** L-**Lysine,** biological studies
63-91-2, L-**Phenylalanine,** biological studies
6893-02-3, Triiodothyronine **59112-80-0,** C-Peptide
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(protein-retaining effects of growth hormone during fasting involve inhibition of muscle-protein breakdown in humans in relation to underlying mechanism)
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



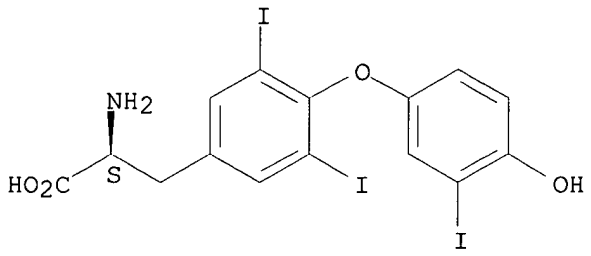
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 59112-80-0 HCAPLUS
CN Proinsulin C-peptide (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 11 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:259972 HCAPLUS
DOCUMENT NUMBER: 132:293042
TITLE: Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles
INVENTOR(S): Van Lengerich, Bernhard H.
PATENT ASSIGNEE(S): General Mills, Inc., USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021504	A1	20000420	WO 1999-US20905	19991006
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2345815	AA	20000420	CA 1999-2345815	19991006
AU 9963872	A1	20000501	AU 1999-63872	19991006
EP 1119345	A1	20010801	EP 1999-951433	19991006
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002527375	T2	20020827	JP 2000-575480	19991006
NO 2000004784	A	20000925	NO 2000-4784	20000925

PRIORITY APPLN. INFO.:
US 1998-103700P P 19981009
US 1998-109696P P 19981124
US 1999-233443 A 19990120
US 1998-79060P P 19980323

Searcher : Shears 308-4994

WO 1999-US4267 W 19990323
WO 1999-US20905 W 19991006

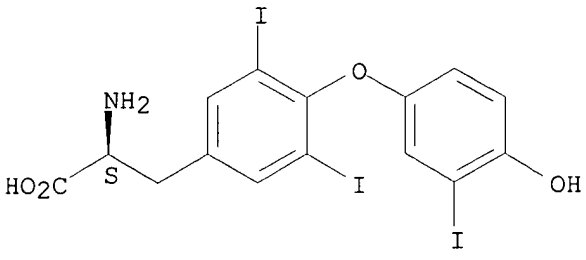
6

AB A liq. encapsulant component which contains an active, sensitive encapsulant, such as a live microorganism or an enzyme dissolved or dispersed in a liq. plasticizer is admixed with a plasticizable matrix material. The matrix material is plasticizable by the liq. plasticizer and the encapsulation of the active encapsulant is accomplished at a low temp. and under low shear conditions. The active component is encapsulated and/or embedded in the plasticizable matrix component or material in a continuous process to produce discrete, solid particles. The liq. content of the liq. encapsulant component provides substantially all or completely all of the liq. plasticizer needed to plasticize the matrix component to obtain a formable, extrudable, cuttable, mixt. or dough. Removal of liq. plasticizer prior to extrusion is not needed to adjust the viscosity of the mixt. for formability. Release of an active component from the matrix may be delayed or controlled over time so that the active component is delivered when and where it is needed to perform its intended function. Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant.

IT **55-06-1**, Liothyronine sodium **56-87-1**, L-**Lysine**, biological studies **63-91-2**, L-**Phenylalanine**, biological studies **9004-10-8**, **Insulin**, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(encapsulation of sensitive liq. components into matrix to obtain discrete shelf-stable particles)

RN 55-06-1 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo-, monosodium salt (9CI) (CA INDEX NAME)

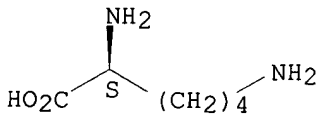
Absolute stereochemistry. Rotation (+).



● Na

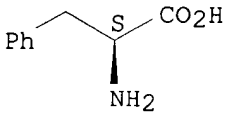
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 12 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:708494 HCAPLUS
DOCUMENT NUMBER: 131:308610
TITLE: Cell culturing method and medium for producing proliferated, normal, differentiated human liver cells
INVENTOR(S): Curcio, Francesco; Coon, Hayden G.; Ambesi-Impiombato, Francesco Saverio
PATENT ASSIGNEE(S): Livercell L.L.C., USA
SOURCE: Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 953633	A1	19991103	EP 1999-303337	19990428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
WO 9423572	A1	19941027	WO 1994-US3101	19940321
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2159804	AA	19941027	CA 1994-2159804	19940321
AU 9464139	A1	19941108	AU 1994-64139	19940321
AU 687386	B2	19980226		
JP 08506735	T2	19960723	JP 1994-523199	19940321
US 5646035	A	19970708	US 1995-480149	19950607
US 5780299	A	19980714	US 1995-480027	19950607
US 5849584	A	19981215	US 1995-485650	19950607

US 5888816	A	19990330	US 1995-480022	19950607
US 6008047	A	19991228	US 1998-66897	19980428
PRIORITY APPLN. INFO.:			US 1998-66897	19980428
			US 1993-44010	19930408
			US 1993-480022	19930607
			US 1993-83772	19930630
			WO 1994-US3101	19940321

AB The present invention provides improvements in a method for producing an expanded non-transformed cell culture of human liver cells comprising the steps of: (1) prepg. partially purified, minced human liver tissue, (2) concg. the resulting cells and tissue pieces, (3) resuspending the concd. tissue cells and pieces in a growth medium, (4) culturing the resuspended cells in the growth medium for a time and under conditions to effect sustained cell division, and (5) passaging the cultured human liver cells periodically to expand the culture. The growth medium comprises a combination of a basal medium and ingredients to provide a medium in which the cultured human liver cells are selectively proliferated without being transformed, providing an expanded culture of proliferated, functionally differentiated human liver cells that is substantially free of fibroblast, macrophage and capillary endothelial cells, the improvement comprising the steps of harvesting cells of the expanded culture at a selected population doubling level (PDL) preferably >5, providing a high d. cell suspension of such proliferated human liver cells, and incubating such high d. cell suspension in a calm-down medium to induce a mitotically quiescent state and, using a culture procedure which encourages aggregation, making the cells adhere tightly to form a three-dimensional cell organization typical of the organ of origin, thereby forming organoids. Methods of gel-embedding the single cells, aggregates and organoids produced by the method; the growth medium and calm-down medium; various different methods for use of the normal, proliferated human liver cells produced by the method, are also provided.

IT **212013-61-1**
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(Coon's Modified F12 Medium contg., bovine; cell culturing method and medium for producing proliferated, normal, differentiated human liver cells)

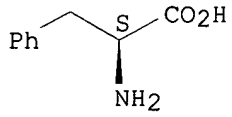
RN 212013-61-1 HCAPLUS
CN Insulin (cattle), sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **63-91-2**, L-**Phenylalanine**, biological studies
6893-02-3, T3
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(Coon's Modified F12 Medium contg.; cell culturing method and medium for producing proliferated, normal, differentiated human liver cells)

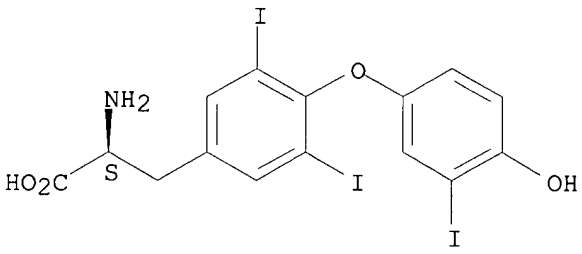
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 13 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:526293 HCAPLUS
DOCUMENT NUMBER: 132:35135
TITLE: Approach of the mechanism of growth-promoting effect of betaine on swine
AUTHOR(S): Xu, Zirong; Wang, Minqi; Huai, Minyan
CORPORATE SOURCE: Feed Science Institute of Zhejiang, Agricultural University, Hangzhou, 310029, Peop. Rep. China
SOURCE: Zhongguo Shouyi Xuebao (1999), 19(4), 399-403
CODEN: ZSXUF5; ISSN: 1005-4545
PUBLISHER: Zhongguo Shouyi Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB A feeding trial using 96 crossbred growing pigs randomly assigned to four groups (each of which included three replicates) receiving the same basal diet supplemented with 0, 1 000, 1 500, 2 000 mg/kg betaine resp. for 62 d were conducted to study the effect of betaine on growth performances of the pigs and to approach the mechanism. The results of feeding trial showed that pigs supplemented with 1 000 mg/kg betaine grew fastest, whose ADG was increased by 13.20% ($P < 0.01$), F/G was decreased by 7.93% ($P < 0.01$), and data obtained from samples anal. of this group showed that levels of GH, IGF-I, T3, T4 in serum were elevated by 101.76% ($P < 0.01$), 44.75% ($P < 0.01$), 26.53% ($P < 0.01$) and 16.83% ($P < 0.05$) resp.; concn. of free Ser in serum was elevated by 14.28% ($P < 0.05$); concn. of total serum protein was increased by 21.69% ($P < 0.01$), while serum urea nitrogen was decreased by 47.67% ($P < 0.01$); content of RNA in LD (longissimus dorsi) and liver, and RNA/DNA ratio in LD were enhanced by 12.60% ($P < 0.05$), 17.80% ($P < 0.02$) and 19.79% ($P < 0.02$) resp.; concns. of cAMP in liver and anterior pituitary were increased

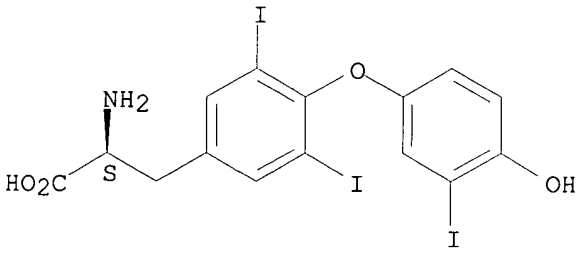
obviously by 47.53% ($P < 0.01$) and 65.21% ($P < 0.01$). The results obtained from this research implicate that supplemental betaine acts on endocrinic system of the pigs and promotes their growth by elevating the levels of GH, IGF-I, T3 and T4 in serum.

IT **6893-02-3**, Triiodothyronine
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(mechanism of growth-promoting effect of betaine on swine in relation to)

RN 6893-02-3 HCAPLUS

CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

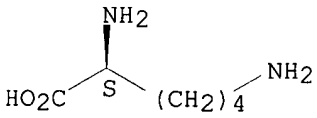


IT **56-87-1**, L-**Lysine**, biological studies
63-91-2, **Phenylalanine**, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(serum; mechanism of growth-promoting effect of betaine on swine in relation to)

RN 56-87-1 HCAPLUS

CN L-Lysine (9CI) (CA INDEX NAME)

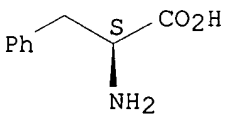
Absolute stereochemistry.



RN 63-91-2 HCAPLUS

CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L42 ANSWER 14 OF 54 HCAPLUS COPYRIGHT 2003 ACS

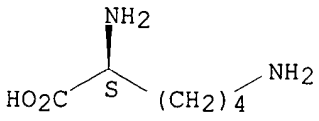
ACCESSION NUMBER: 1999:73422 HCAPLUS
DOCUMENT NUMBER: 130:166799
TITLE: The metabolic consequences of critical illness. Acute effects on glutamine and protein metabolism
AUTHOR(S): Jackson, N. C.; Carroll, P. V.; Russell-Jones, D. L.; Sonksen, P. H.; Treacher, D. F.; Umpleby, A. M.
CORPORATE SOURCE: Departments of Diabetes, Endocrinology and Metabolic Medicine, St. Thomas' Hospital, London, SE1 7EH, UK
SOURCE: American Journal of Physiology (1999), 276(1, Pt. 1), E163-E170
CODEN: AJPHAP; ISSN: 0002-9513
PUBLISHER: American Physiological Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Net protein loss and large decreases in plasma Glx concn. are characteristics of crit. illness. We have used [2-15N]Glx and [1-13C]Leu to investigate whole body Glx and Leu kinetics in a group of critically ill patients and matched healthy controls. Glx appearance rate (Ra,Gln) was similar in both groups. In the patients, the proportion of Ra,Gln arising from protein breakdown was higher than in the control group (43 vs. 32%). Glx metabolic clearance rate (MCR) was 92% higher, whereas plasma Glx concn. was 38% lower than in the control group. Leu appearance rate (whole body proteolysis) and nonoxidative Leu disposal (whole body protein synthesis) were 59 and 49% higher in the patients. Leu oxidn. and MCR were increased in the patients by 104 and 129%, resp. These results demonstrate that crit. illness is assocd. with a major increase in protein turnover. The acute decrease in plasma Glx concn. and the unaltered plasma Ra,Gln suggest that the increase in proteolysis is insufficient to meet increased demand for Glx in this severe catabolic state.

IT **56-87-1**, **Lysine**, biological studies
63-91-2, **Phenylalanine**, biological studies
6893-02-3, Triiodothyronine **9004-10-8**, **Insulin**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(crit. illness effects on Glx and protein metab.)

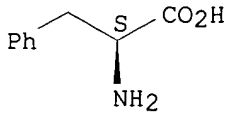
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



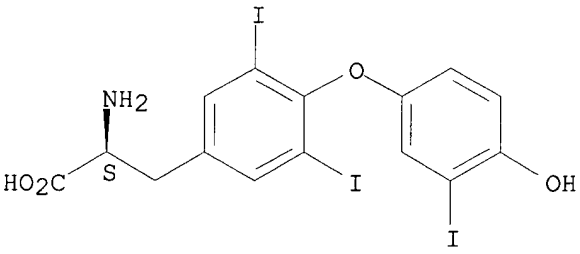
RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 15 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:293427 HCAPLUS
DOCUMENT NUMBER: 129:8597
TITLE: Embedding and encapsulation of controlled release particles
INVENTOR(S): Van Lengerich, Bernhard H.
PATENT ASSIGNEE(S): Van Lengerich, Bernhard H., USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9818610	A1	19980507	WO 1997-US18984	19971027
W: AU, CA, JP, NO, PL, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9749915	A1	19980522	AU 1997-49915	19971027
AU 744156	B2	20020214		
EP 935523	A1	19990818	EP 1997-912825	19971027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002511777	T2	20020416	JP 1998-520558	19971027

NO 9902036 A 19990428 NO 1999-2036 19990428
PRIORITY APPLN. INFO.: US 1996-29038P P 19961028
US 1997-52717P P 19970716
WO 1997-US18984 W 19971027

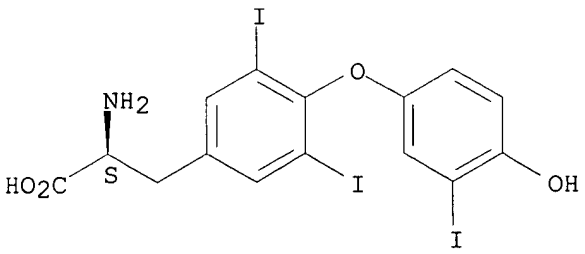
AB Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant. A release-rate controlling component is incorporated into the matrix to control the rate of release of the encapsulant from the particles. The addnl. component may be a hydrophobic component or a high water binding capacity component for extending the release time. The plasticizable matrix material, such as starch, is admixed with at least one plasticizer, such as water, and at least one release-rate controlling component under low shear mixing conditions to plasticize the plasticizable material without substantially destroying the at least one plasticizable material and to obtain a substantially homogeneous plasticized mass. The plasticizer content is substantially reduced and the temp. of the plasticized mass is substantially reduced prior to admixing the plasticized mass with the encapsulant to avoid substantial destruction of the encapsulant and to obtain a formable, extrudable mixt. The mixt. is extruded though a die without substantial or essentially no expansion and cut into discrete, relatively dense particles. Release properties may also be controlled by precoating the encapsulant and/or coating the extruded particles with a film-forming component. An example of encapsulation of acetylcysteine is given using starch, polyethylene, glycerol monostearate, and vegetable oil.

IT **55-06-1**, Liothyronine sodium **56-87-1**, L-**Lysine**, biological studies **63-91-2**, **Phenylalanine**, biological studies **9004-10-8**, **Insulin**, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(embedding and encapsulation of controlled release particles)

RN 55-06-1 HCAPLUS

CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo-, monosodium salt (9CI) (CA INDEX NAME)

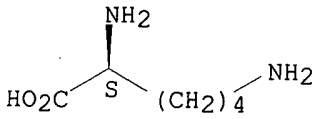
Absolute stereochemistry. Rotation (+).



● Na

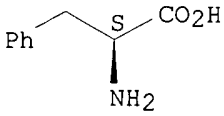
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 9004-10-8 HCAPLUS
CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 16 OF 54 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:251257 HCAPLUS
DOCUMENT NUMBER: 128:292522
TITLE: Defined systems for epithelial cell culture and use thereof
INVENTOR(S): Judd, David A.; Battista, Paul J.
PATENT ASSIGNEE(S): Life Technologies, Inc., USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9816629	A1	19980423	WO 1997-US18260	19971009
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9747517	A1	19980511	AU 1997-47517	19971009
EP 939797	A1	19990908	EP 1997-910044	19971009

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

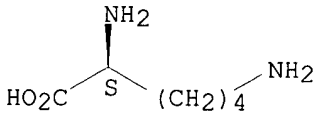
PRIORITY APPLN. INFO.: US 1996-28471P P 19961011
WO 1997-US18260 W 19971009

AB The present invention provides cell culture media formulations which support the in vitro cultivation of animal epithelial cells. The media comprise at least one fibroblast growth factor (FGF) and at least one agent that induces increased intracellular cAMP levels, and optionally comprise ascorbic acid. The present invention also provides methods of cultivating animal epithelial cells in vitro using these cell culture media formulations, kits comprising the media, cell culture compns. comprising the culture media and an animal epithelial cell, and compns. that may be used as replacements for organ or gland exts. in animal cell culture media.

IT **56-87-1**, **-Lysine**, biological studies
63-91-2, L-**Phenylalanine**, biological studies
6893-02-3, t3 **9004-10-8**, **Insulin**,
biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(defined systems for epithelial cell culture and use thereof)

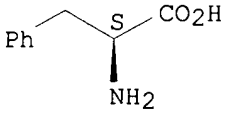
RN 56-87-1 HCAPLUS
CN L-Lysine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 63-91-2 HCAPLUS
CN L-Phenylalanine (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 6893-02-3 HCAPLUS
CN L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

US 097194230FP1

Creation date: 10-05-2003
Indexing Officer: AKABIA - ABDUL KABIA
Team: OIPEBackFileIndexing
Dossier: 09719423

Legal Date: 03-07-2003

No.	Doccode	Number of pages
1	SRNT	61

Total number of pages: 61

Remarks:

Order of re-scan issued on .....